

**State:** Pennsylvania **Filing Company:** Metropolitan Life Insurance Company  
**TOI/Sub-TOI:** LTC03G Group Long Term Care/LTC03G.001 Qualified  
**Product Name:** Group Long-Term Care Insurance  
**Project Name/Number:** 2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing

## Filing at a Glance

Company: Metropolitan Life Insurance Company  
Product Name: Group Long-Term Care Insurance  
State: Pennsylvania  
TOI: LTC03G Group Long Term Care  
Sub-TOI: LTC03G.001 Qualified  
Filing Type: Rate - Other (Not M.U. or G.I. Product)  
Date Submitted: 04/23/2020  
SERFF Tr Num: META-132350262  
SERFF Status: Assigned  
State Tr Num: META-132350262  
State Status: Received Review in Progress  
Co Tr Num: CT20-82 GROUP HIPPA (RATE) CL  
  
Implementation: On Approval  
Date Requested:  
Author(s): Cherise Livingston, Cory Searles, Patricia Brabant, Keith Bal  
Reviewer(s): Jim Lavery (primary)  
Disposition Date:  
Disposition Status:  
Implementation Date:

### State Filing Description:

Proposed 6.82% increase on 5,460 policyholders of MetLife group LTC forms GPNP99-LTC and G.LTC6997.

**State:** Pennsylvania **Filing Company:** Metropolitan Life Insurance Company  
**TOI/Sub-TOI:** LTC03G Group Long Term Care/LTC03G.001 Qualified  
**Product Name:** Group Long-Term Care Insurance  
**Project Name/Number:** 2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing

## General Information

Project Name: 2020 Group Rate Increase Filings  
Project Number: CT20-82 Group HIPAA Rate Filing  
Requested Filing Mode: Review & Approval  
Explanation for Combination/Other:  
Submission Type: Resubmission  
Group Market Size: Large  
Overall Rate Impact:

Status of Filing in Domicile:  
Date Approved in Domicile:  
Domicile Status Comments:  
Market Type: Group  
Previous Filing Number: META-132204151  
Group Market Type: Employer  
Filing Status Changed: 04/23/2020  
State Status Changed: 04/23/2020  
Created By: Cherise Livingston  
Corresponding Filing Tracking Number: META-132350297  
State TOI: LTC03G Group Long Term Care

Deemer Date:

Submitted By: Cherise Livingston

### Filing Description:

This is a filing of a premium rate schedule increase for group long-term care insurance policies. Please see our filing letter for details.

## Company and Contact

### Filing Contact Information

Deborah Fountas, Sr. Product Consultant dfountas@metlife.com  
1300 Hall Blvd 860-656-3808 [Phone]  
Bloomfield, CT 06002 860-656-3815 [FAX]

### Filing Company Information

Metropolitan Life Insurance Company	CoCode: 65978	State of Domicile: New York
MetLife	Group Code: 241	Company Type: Life
200 Park Avenue	Group Name:	State ID Number:
New York, NY 10166	FEIN Number: 13-5581829	
(212) 578-2211 ext. [Phone]		

## Filing Fees

Fee Required? No  
Retaliatory? No  
Fee Explanation:

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	Group Long-Term Care Insurance		
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing		

## Correspondence Summary

### Amendments

Schedule	Schedule Item Name	Created By	Created On	Date Submitted
Supporting Document	Exhibits	Cherise Livingston	05/31/2020	05/31/2020

### Filing Notes

Subject	Note Type	Created By	Created On	Date Submitted
I need Excel versions of the experience exhibits	Note To Filer	Jim Laverty	04/24/2020	04/24/2020

<b>SERFF Tracking #:</b>	META-132350262	<b>State Tracking #:</b>	META-132350262	<b>Company Tracking #:</b>	CT20-82 GROUP HIPPA (RATE) CL
<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company		
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified				
<b>Product Name:</b>	Group Long-Term Care Insurance				
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing				

## Amendment Letter

Submitted Date: 05/31/2020

Comments:

We are in receipt of your Note to Filer April 24, 2020 in connection with the above-captioned submission.

Please see the attached Exhibits as requested in a Excel Workbook format.

Thank you for your attention to our filing.

Deborah Fountas, LTCP, PMP

MetLife Long Term Care

Sr. Product Consultant

860-656-3808

Changed Items:

*No Form Schedule Items Changed.*

*No Rate Schedule Items Changed.*

Supporting Document Schedule Item Changes	
<b>Satisfied - Item:</b>	Exhibits
<b>Comments:</b>	Please see attached the Act Memo Exhibits
<b>Attachment(s):</b>	2019_Group_ActMemo_LossRatio - PA(Exhibits).xlsx 2019_Group_ActMemo_LossRatio PA (Exhibits).pdf

**SERFF Tracking #:** META-132350262

**State Tracking #:** META-132350262

**Company Tracking #:** CT20-82 GROUP HIPPA (RATE)  
CL

**State:** Pennsylvania

**Filing Company:** Metropolitan Life Insurance Company

**TOI/Sub-TOI:** LTC03G Group Long Term Care/LTC03G.001 Qualified

**Product Name:** Group Long-Term Care Insurance

**Project Name/Number:** 2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing

## Note To Filer

**Created By:**

Jim Lavery on 04/24/2020 08:33 AM

**Last Edited By:**

Jim Lavery

**Submitted On:**

04/24/2020 08:33 AM

**Subject:**

I need Excel versions of the experience exhibits

**Comments:**

Please provide the tables in this filing in an Excel workbook.

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	Group Long-Term Care Insurance		
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing		

## Rate Information

Rate data applies to filing.

<b>Filing Method:</b>	
<b>Rate Change Type:</b>	%
<b>Overall Percentage of Last Rate Revision:</b>	%
<b>Effective Date of Last Rate Revision:</b>	
<b>Filing Method of Last Filing:</b>	
<b>SERFF Tracking Number of Last Filing:</b>	

### Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Metropolitan Life Insurance Company	6.820%	6.820%	\$563,816	5,460	\$8,267,092	6.820%	6.820%

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	Group Long-Term Care Insurance		
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing		

## Rate/Rule Schedule

Item No.	Schedule Item Status	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments
1		Group Rates PA Generic Current with 6.82% increase	GPNP99-LTC, G.LTC6997	Revised	Previous State Filing Number:  Percent Rate Change Request: 6.82	Group Rates_PA_Generic_Current_With_6.82%Increase.pdf,

**Group Long-Term Care Insurance Nursing Home Benefits**  
**Monthly Premium Rates per \$100 Daily Benefits**  
**Current Annual Rates with Proposed 6.82% Increase**

Plans with Optional Inflation Feature				
MAX YRS	2	2	10	10
WP DAYS	10	180	10	180
Age:				
30	\$1.93	\$1.45	\$3.58	\$2.80
31	\$2.13	\$1.59	\$3.90	\$3.06
32	\$2.31	\$1.73	\$4.26	\$3.33
33	\$2.52	\$1.90	\$4.65	\$3.64
34	\$2.78	\$2.07	\$5.06	\$3.96
35	\$3.02	\$2.28	\$5.53	\$4.33
36	\$3.31	\$2.48	\$6.05	\$4.71
37	\$3.62	\$2.71	\$6.58	\$5.14
38	\$3.96	\$2.96	\$7.19	\$5.61
39	\$4.33	\$3.24	\$7.84	\$6.12
40	\$4.74	\$3.55	\$8.57	\$6.67
41	\$5.16	\$3.86	\$9.29	\$7.23
42	\$5.62	\$4.20	\$10.09	\$7.85
43	\$6.12	\$4.57	\$10.98	\$8.52
44	\$6.67	\$4.99	\$11.93	\$9.25
45	\$7.26	\$5.43	\$12.95	\$10.04
46	\$7.90	\$5.90	\$14.07	\$10.88
47	\$8.61	\$6.43	\$15.29	\$11.81
48	\$9.39	\$7.00	\$16.60	\$12.83
49	\$10.22	\$7.62	\$18.04	\$13.93
50	\$11.14	\$8.30	\$19.59	\$15.10
51	\$12.26	\$9.14	\$21.51	\$16.56
52	\$13.50	\$10.07	\$23.62	\$18.15
53	\$14.87	\$11.09	\$25.95	\$19.92
54	\$16.39	\$12.21	\$28.47	\$21.84
55	\$18.06	\$13.45	\$31.26	\$23.95
56	\$19.89	\$14.81	\$34.32	\$26.26
57	\$21.90	\$16.31	\$37.69	\$28.78
58	\$24.13	\$17.96	\$41.37	\$31.57
59	\$26.58	\$19.78	\$45.41	\$34.60
60	\$29.29	\$21.78	\$49.86	\$37.95
61	\$32.42	\$24.10	\$54.99	\$41.79
62	\$35.90	\$26.67	\$60.65	\$46.02
63	\$39.75	\$29.50	\$66.90	\$50.66
64	\$44.00	\$32.65	\$73.77	\$55.80
65	\$48.73	\$36.14	\$81.38	\$61.44
66	\$53.77	\$39.85	\$89.52	\$67.49
67	\$59.35	\$43.95	\$98.47	\$74.11
68	\$65.52	\$48.45	\$108.32	\$81.38
69	\$72.31	\$53.44	\$119.14	\$89.38
70	\$79.79	\$58.92	\$131.07	\$98.16
71	\$87.85	\$64.79	\$143.83	\$107.53
72	\$96.71	\$71.24	\$157.86	\$117.78
73	\$106.46	\$78.33	\$173.24	\$129.03
74	\$117.19	\$86.13	\$190.13	\$141.35
75	\$129.01	\$94.72	\$208.66	\$154.85
76	\$141.32	\$103.64	\$227.89	\$168.79
77	\$154.81	\$113.41	\$248.88	\$183.98
78	\$169.58	\$124.09	\$271.80	\$200.53
79	\$185.76	\$135.79	\$296.83	\$218.58
80	\$203.48	\$148.60	\$324.19	\$238.26
81	\$219.32	\$159.61	\$348.32	\$255.13
82	\$236.37	\$171.45	\$374.22	\$273.21
83	\$254.77	\$184.17	\$402.09	\$292.56
84	\$274.59	\$197.82	\$432.01	\$313.28
85	\$295.94	\$212.48	\$464.18	\$335.48
86	\$318.98	\$228.24	\$498.73	\$359.24
87	\$343.79	\$245.16	\$535.84	\$384.67
88	\$370.54	\$263.34	\$575.73	\$411.91
89	\$399.37	\$282.86	\$618.58	\$441.09
90	\$430.44	\$303.83	\$664.61	\$472.34

Plans with Automatic Inflation Protection Feature				
MAX YRS	2	2	10	10
WP DAYS	10	180	10	180
Age:				
30	\$12.59	\$9.65	\$23.28	\$18.35
31	\$13.31	\$10.19	\$24.58	\$19.37
32	\$14.07	\$10.77	\$25.95	\$20.45
33	\$14.86	\$11.39	\$27.39	\$21.58
34	\$15.69	\$12.02	\$28.92	\$22.77
35	\$16.59	\$12.70	\$30.53	\$24.02
36	\$17.52	\$13.42	\$32.23	\$25.36
37	\$18.51	\$14.18	\$34.01	\$26.77
38	\$19.56	\$14.97	\$35.92	\$28.25
39	\$20.66	\$15.81	\$37.92	\$29.81
40	\$21.82	\$16.70	\$40.03	\$31.46
41	\$23.06	\$17.65	\$42.24	\$33.18
42	\$24.37	\$18.65	\$44.57	\$34.99
43	\$25.74	\$19.69	\$47.01	\$36.91
44	\$27.20	\$20.80	\$49.61	\$38.93
45	\$28.75	\$21.98	\$52.34	\$41.05
46	\$30.37	\$23.22	\$55.24	\$43.29
47	\$32.09	\$24.52	\$58.27	\$45.64
48	\$33.90	\$25.91	\$61.50	\$48.14
49	\$35.81	\$27.37	\$64.88	\$50.77
50	\$37.84	\$28.92	\$68.46	\$53.55
51	\$40.24	\$30.73	\$72.65	\$56.76
52	\$42.78	\$32.67	\$77.09	\$60.20
53	\$45.47	\$34.73	\$81.79	\$63.82
54	\$48.36	\$36.91	\$86.80	\$67.69
55	\$51.41	\$39.23	\$92.10	\$71.77
56	\$54.66	\$41.71	\$97.74	\$76.11
57	\$58.11	\$44.33	\$103.71	\$80.70
58	\$61.78	\$47.12	\$110.05	\$85.57
59	\$65.68	\$50.09	\$116.79	\$90.73
60	\$69.84	\$53.24	\$123.92	\$96.21
61	\$74.66	\$56.89	\$132.14	\$102.49
62	\$79.82	\$60.79	\$140.88	\$109.15
63	\$85.33	\$64.96	\$150.23	\$116.26
64	\$91.21	\$69.40	\$160.19	\$123.84
65	\$97.52	\$74.17	\$170.82	\$131.90
66	\$104.38	\$79.31	\$182.33	\$140.61
67	\$111.72	\$84.82	\$194.64	\$149.89
68	\$119.57	\$90.72	\$207.76	\$159.78
69	\$127.98	\$97.02	\$221.77	\$170.34
70	\$136.99	\$103.76	\$236.73	\$181.56
71	\$146.80	\$111.06	\$252.98	\$193.69
72	\$157.34	\$118.88	\$270.33	\$206.63
73	\$168.59	\$127.25	\$288.87	\$220.43
74	\$180.70	\$136.23	\$308.70	\$235.16
75	\$193.64	\$145.81	\$329.87	\$250.88
76	\$207.40	\$155.96	\$352.15	\$267.26
77	\$222.12	\$166.80	\$375.94	\$284.73
78	\$237.90	\$178.40	\$401.33	\$303.35
79	\$254.80	\$190.82	\$428.43	\$323.17
80	\$272.90	\$204.10	\$457.39	\$344.29
81	\$289.57	\$215.70	\$483.52	\$362.64
82	\$307.26	\$227.96	\$511.13	\$381.97
83	\$326.01	\$240.93	\$540.33	\$402.33
84	\$345.93	\$254.64	\$571.20	\$423.77
85	\$367.05	\$269.12	\$603.83	\$446.35
86	\$389.49	\$284.42	\$638.32	\$470.11
87	\$413.28	\$300.59	\$674.79	\$495.19
88	\$438.51	\$317.69	\$713.34	\$521.56
89	\$465.29	\$335.76	\$754.10	\$549.36
90	\$493.71	\$354.86	\$797.19	\$578.63

**Group Long-Term Care Insurance - Comprehensive and Dual Level Reimbursement Benefits**

**Monthly Premium Rates per \$100 Daily Benefits**

**Current Annual Rates with Proposed 6.82% Increase**

Plans with Optional Inflation Feature								
MAX YRS	2	2	2	2	10	10	10	10
HC %	50	50	100	100	50	50	100	100
WP DAYS	10	180	10	180	10	180	10	180
Age:								
30	\$4.86	\$3.61	\$7.08	\$5.31	\$6.60	\$5.05	\$10.21	\$7.73
31	\$5.20	\$3.86	\$7.51	\$5.64	\$7.08	\$5.43	\$10.88	\$8.26
32	\$5.54	\$4.12	\$7.99	\$5.99	\$7.59	\$5.81	\$11.60	\$8.80
33	\$5.92	\$4.40	\$8.49	\$6.37	\$8.15	\$6.24	\$12.36	\$9.39
34	\$6.32	\$4.71	\$9.02	\$6.77	\$8.74	\$6.71	\$13.18	\$10.02
35	\$6.72	\$5.00	\$9.57	\$7.20	\$9.36	\$7.20	\$14.05	\$10.69
36	\$7.19	\$5.36	\$10.16	\$7.64	\$10.05	\$7.73	\$14.98	\$11.40
37	\$7.65	\$5.71	\$10.81	\$8.13	\$10.78	\$8.30	\$15.98	\$12.16
38	\$8.18	\$6.10	\$11.47	\$8.63	\$11.56	\$8.91	\$17.04	\$12.97
39	\$8.72	\$6.52	\$12.19	\$9.19	\$12.39	\$9.56	\$18.15	\$13.83
40	\$9.29	\$6.95	\$12.95	\$9.76	\$13.28	\$10.25	\$19.37	\$14.76
41	\$10.02	\$7.50	\$13.91	\$10.49	\$14.35	\$11.08	\$20.83	\$15.89
42	\$10.81	\$8.10	\$14.94	\$11.26	\$15.48	\$11.95	\$22.43	\$17.11
43	\$11.64	\$8.74	\$16.04	\$12.11	\$16.72	\$12.91	\$24.13	\$18.42
44	\$12.55	\$9.42	\$17.24	\$13.02	\$18.04	\$13.95	\$25.96	\$19.83
45	\$13.53	\$10.16	\$18.52	\$14.00	\$19.51	\$15.07	\$27.95	\$21.36
46	\$14.57	\$10.97	\$19.89	\$15.05	\$21.05	\$16.28	\$30.09	\$22.99
47	\$15.70	\$11.84	\$21.37	\$16.18	\$22.72	\$17.58	\$32.39	\$24.75
48	\$16.94	\$12.76	\$22.96	\$17.39	\$24.54	\$18.97	\$34.86	\$26.65
49	\$18.24	\$13.76	\$24.65	\$18.69	\$26.50	\$20.51	\$37.52	\$28.68
50	\$19.69	\$14.84	\$26.50	\$20.10	\$28.60	\$22.15	\$40.38	\$30.90
51	\$21.41	\$16.17	\$28.68	\$21.78	\$31.19	\$24.15	\$43.82	\$33.53
52	\$23.30	\$17.59	\$31.07	\$23.61	\$33.98	\$26.32	\$47.56	\$36.40
53	\$25.33	\$19.16	\$33.66	\$25.58	\$37.07	\$28.68	\$51.59	\$39.50
54	\$27.57	\$20.86	\$36.45	\$27.73	\$40.40	\$31.28	\$56.00	\$42.86
55	\$29.98	\$22.71	\$39.47	\$30.05	\$44.05	\$34.09	\$60.76	\$46.53
56	\$32.62	\$24.74	\$42.74	\$32.57	\$48.00	\$37.18	\$65.94	\$50.49
57	\$35.50	\$26.92	\$46.26	\$35.30	\$52.35	\$40.54	\$71.56	\$54.80
58	\$38.59	\$29.32	\$50.12	\$38.26	\$57.06	\$44.19	\$77.65	\$59.48
59	\$41.99	\$31.92	\$54.28	\$41.47	\$62.20	\$48.18	\$84.26	\$64.56
60	\$45.70	\$34.76	\$58.78	\$44.93	\$67.81	\$52.51	\$91.43	\$70.05
61	\$49.98	\$38.04	\$63.92	\$48.88	\$74.30	\$57.52	\$99.58	\$76.28
62	\$54.68	\$41.65	\$69.53	\$53.21	\$81.40	\$62.99	\$108.43	\$83.08
63	\$59.80	\$45.57	\$75.62	\$57.90	\$89.18	\$69.02	\$118.10	\$90.47
64	\$65.43	\$49.87	\$82.26	\$62.99	\$97.71	\$75.59	\$128.60	\$98.51
65	\$71.57	\$54.59	\$89.46	\$68.56	\$107.04	\$82.79	\$140.06	\$107.28
66	\$78.28	\$59.69	\$97.35	\$74.59	\$117.11	\$90.52	\$152.31	\$116.62
67	\$85.63	\$65.29	\$105.95	\$81.16	\$128.12	\$98.98	\$165.66	\$126.80
68	\$93.65	\$71.41	\$115.30	\$88.32	\$140.18	\$108.22	\$180.15	\$137.84
69	\$102.43	\$78.07	\$125.46	\$96.10	\$153.35	\$118.34	\$195.92	\$149.87
70	\$112.03	\$85.40	\$136.55	\$104.53	\$167.77	\$129.38	\$213.08	\$162.93
71	\$122.64	\$93.41	\$148.82	\$113.83	\$183.45	\$141.30	\$231.51	\$176.89
72	\$134.24	\$102.16	\$162.18	\$123.92	\$200.55	\$154.37	\$251.54	\$192.07
73	\$146.97	\$111.76	\$176.76	\$134.94	\$219.28	\$168.59	\$273.30	\$208.56
74	\$160.88	\$122.23	\$192.64	\$146.90	\$239.76	\$184.17	\$296.95	\$226.46
75	\$176.12	\$133.70	\$209.93	\$159.94	\$262.11	\$201.14	\$322.65	\$245.89
76	\$193.16	\$146.39	\$229.41	\$174.47	\$286.84	\$219.66	\$351.18	\$267.16
77	\$211.86	\$160.26	\$250.67	\$190.30	\$313.90	\$239.90	\$382.23	\$290.27
78	\$232.37	\$175.47	\$273.92	\$207.55	\$343.53	\$261.98	\$416.02	\$315.40
79	\$254.84	\$192.13	\$299.31	\$226.38	\$375.93	\$286.11	\$452.79	\$342.69
80	\$279.49	\$210.34	\$327.05	\$246.93	\$411.39	\$312.46	\$492.81	\$372.34
81	\$305.74	\$228.79	\$357.11	\$268.17	\$448.07	\$338.44	\$535.20	\$402.31
82	\$334.42	\$248.85	\$389.95	\$291.26	\$488.01	\$366.57	\$581.21	\$434.66
83	\$365.81	\$270.67	\$425.80	\$316.29	\$531.51	\$397.06	\$631.20	\$469.63
84	\$400.13	\$294.40	\$464.94	\$343.53	\$578.90	\$430.07	\$685.47	\$507.43
85	\$437.68	\$320.21	\$507.68	\$373.08	\$630.49	\$465.83	\$744.41	\$548.28
86	\$478.75	\$348.30	\$554.35	\$405.18	\$686.70	\$504.55	\$808.42	\$592.39
87	\$523.66	\$378.85	\$605.32	\$440.04	\$747.93	\$546.49	\$877.94	\$640.07
88	\$572.81	\$412.08	\$660.97	\$477.89	\$814.59	\$591.92	\$953.43	\$691.55
89	\$626.55	\$448.22	\$721.74	\$519.02	\$887.21	\$641.14	\$1,035.42	\$747.20
90	\$685.36	\$487.53	\$788.08	\$563.67	\$966.33	\$694.46	\$1,124.46	\$807.31

Plans with Automatic Inflation Protection Feature								
MAX YRS	2	2	2	2	10	10	10	10
HC %	50	50	100	100	50	50	100	100
WP DAYS	10	180	10	180	10	180	10	180
Age:								
30	\$21.96	\$16.80	\$25.71	\$19.82	\$33.05	\$25.96	\$38.48	\$30.18
31	\$23.03	\$17.63	\$26.94	\$20.76	\$34.71	\$27.29	\$40.37	\$31.69
32	\$24.13	\$18.49	\$28.20	\$21.75	\$36.48	\$28.68	\$42.34	\$33.25
33	\$25.31	\$19.39	\$29.54	\$22.78	\$38.32	\$30.14	\$44.44	\$34.90
34	\$26.53	\$20.35	\$30.91	\$23.86	\$40.27	\$31.69	\$46.63	\$36.63
35	\$27.84	\$21.33	\$32.39	\$25.00	\$42.29	\$33.31	\$48.93	\$38.44
36	\$29.16	\$22.38	\$33.93	\$26.19	\$44.44	\$34.99	\$51.35	\$40.35
37	\$30.59	\$23.48	\$35.52	\$27.43	\$46.68	\$36.77	\$53.87	\$42.34
38	\$32.08	\$24.64	\$37.18	\$28.75	\$49.05	\$38.65	\$56.52	\$44.46
39	\$33.63	\$25.84	\$38.94	\$30.11	\$51.53	\$40.61	\$59.31	\$46.64
40	\$35.25	\$27.11	\$40.78	\$31.55	\$54.14	\$42.67	\$62.22	\$48.96
41	\$37.08	\$28.51	\$42.86	\$33.16	\$56.99	\$44.92	\$65.47	\$51.52
42	\$39.00	\$30.01	\$45.02	\$34.86	\$59.99	\$47.30	\$68.87	\$54.20
43	\$41.03	\$31.59	\$47.33	\$36.65	\$63.15	\$49.80	\$72.45	\$57.00
44	\$43.13	\$33.22	\$49.74	\$38.52	\$66.47	\$52.42	\$76.19	\$59.96
45	\$45.39	\$34.96	\$52.26	\$40.47	\$69.98	\$55.18	\$80.16	\$63.07
46	\$47.74	\$36.79	\$54.93	\$42.57	\$73.66	\$58.09	\$84.32	\$66.36
47	\$50.19	\$38.69	\$57.71	\$44.75	\$77.55	\$61.15	\$88.70	\$69.81
48	\$52.80	\$40.72	\$60.64	\$47.02	\$81.63	\$64.37	\$93.31	\$73.43
49	\$55.55	\$42.86	\$63.72	\$49.43	\$85.94	\$67.77	\$98.16	\$77.24
50	\$58.42	\$45.09	\$66.95	\$51.97	\$90.46	\$71.32	\$103.25	\$81.27
51	\$61.75	\$47.67	\$70.69	\$54.87	\$95.72	\$75.46	\$109.14	\$85.88
52	\$65.29	\$50.42	\$74.65	\$57.94	\$101.30	\$79.85	\$115.38	\$90.80
53	\$69.02	\$53.32	\$78.79	\$61.21	\$107.18	\$84.49	\$121.99	\$95.97
54	\$72.96	\$56.38	\$83.19	\$64.64	\$113.42	\$89.39	\$128.96	\$101.44
55	\$77.10	\$59.62	\$87.84	\$68.26	\$120.02	\$94.58	\$136.31	\$107.23
56	\$81.51	\$63.05	\$92.73	\$72.08	\$127.01	\$100.07	\$144.11	\$113.34
57	\$86.16	\$66.68	\$97.89	\$76.11	\$134.40	\$105.88	\$152.37	\$119.79
58	\$91.09	\$70.50	\$103.36	\$80.40	\$142.22	\$112.01	\$161.07	\$126.60
59	\$96.30	\$74.56	\$109.14	\$84.89	\$150.51	\$118.54	\$170.27	\$133.83
60	\$101.79	\$78.84	\$115.23	\$89.66	\$159.27	\$125.42	\$179.99	\$141.46
61	\$108.10	\$83.77	\$122.16	\$95.09	\$169.30	\$133.25	\$191.09	\$150.11
62	\$114.80	\$88.97	\$129.50	\$100.82	\$179.97	\$141.58	\$202.87	\$159.32
63	\$121.91	\$94.48	\$137.31	\$106.88	\$191.30	\$150.45	\$215.37	\$169.06
64	\$129.48	\$100.37	\$145.60	\$113.35	\$203.35	\$159.86	\$228.65	\$179.40
65	\$137.50	\$106.61	\$154.34	\$120.19	\$216.16	\$169.87	\$242.76	\$190.39
66	\$146.38	\$113.47	\$164.05	\$127.69	\$230.10	\$180.70	\$258.05	\$202.25
67	\$155.83	\$120.75	\$174.39	\$135.68	\$244.94	\$192.22	\$274.32	\$214.86
68	\$165.89	\$128.49	\$185.38	\$144.15	\$260.76	\$204.49	\$291.61	\$228.26
69	\$176.61	\$136.77	\$197.03	\$153.17	\$277.57	\$217.53	\$309.98	\$242.48
70	\$188.02	\$145.55	\$209.44	\$162.74	\$295.46	\$231.39	\$329.51	\$257.60
71	\$200.80	\$155.27	\$223.38	\$173.40	\$315.09	\$246.49	\$350.88	\$274.00
72	\$214.44	\$165.67	\$238.25	\$184.76	\$336.00	\$262.56	\$373.60	\$291.47
73	\$229.05	\$176.78	\$254.11	\$196.87	\$358.28	\$279.70	\$397.83	\$310.05
74	\$244.62	\$188.61	\$271.02	\$209.75	\$382.08	\$297.94	\$423.64	\$329.81
75	\$261.25	\$201.23	\$289.09	\$223.49	\$407.42	\$317.38	\$451.08	\$350.83
76	\$280.21	\$215.40	\$309.84	\$239.08	\$435.89	\$338.82	\$482.23	\$374.28
77	\$300.52	\$230.60	\$332.08	\$255.77	\$466.34	\$361.72	\$515.55	\$399.27
78	\$322.33	\$246.85	\$355.93	\$273.63	\$498.91	\$386.16	\$551.16	\$425.94
79	\$345.71	\$264.24	\$381.50	\$292.73	\$533.76	\$412.25	\$589.21	\$454.40
80	\$370.80	\$282.87	\$408.90	\$313.15	\$571.05	\$440.10	\$629.92	\$484.77
81	\$399.09	\$302.64	\$440.50	\$335.41	\$611.61	\$468.68	\$675.31	\$516.81
82	\$429.52	\$323.79	\$474.58	\$359.27	\$655.04	\$499.10	\$723.96	\$550.96
83	\$462.28	\$346.41	\$511.29	\$384.79	\$701.54	\$531.50	\$776.13	\$587.37
84	\$497.57	\$370.62	\$550.83	\$412.14	\$751.37	\$566.01	\$832.06	\$626.19
85	\$535.51	\$396.52	\$593.44	\$441.43	\$804.73	\$602.75	\$892.02	\$667.57
86	\$576.36	\$424.22	\$639.34	\$472.82	\$861.87	\$641.89	\$956.30	\$711.70
87	\$620.34	\$453.87	\$688.78	\$506.42	\$923.07	\$683.55	\$1,025.22	\$758.72
88	\$667.65	\$485.59	\$742.06	\$542.41	\$988.61	\$727.94	\$1,099.09	\$808.87
89	\$718.58	\$519.53	\$799.44	\$580.97	\$1,058.81	\$775.20	\$1,178.29	\$862.33
90	\$773.39	\$555.82	\$861.28	\$622.27	\$1,134.00	\$825.53	\$1,263.18	\$919.32

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	Group Long-Term Care Insurance		
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing		

## Supporting Document Schedules

<b>Satisfied - Item:</b>	Transmittal Letter (A&H)
<b>Comments:</b>	Please see attached the Filing Letter
<b>Attachment(s):</b>	PA_Filing Letter A - Approval States with Sitused Groups_2020.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Actuarial Certification (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Actuarial Memorandum and Explanatory Information (A&H)
<b>Comments:</b>	Please see attached the Actuarial Memorandum and Explanatory Information (A&H)
<b>Attachment(s):</b>	Group_2019_ActMemo- (SITUS_Not_ET) RateStability - PA.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Advertisements (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Authorization to File (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Insert Page Explanation (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	Group Long-Term Care Insurance		
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing		

<b>Bypassed - Item:</b>	Rate Table (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Replacement Form with Highlighted Changes (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Advertisement Compliance Certification
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Reserve Calculation (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Variability Explanation (A&H)
<b>Bypass Reason:</b>	not applicable
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Policyholder Letter
<b>Comments:</b>	Please see attached the
<b>Attachment(s):</b>	Group Letter_Generic_new template_1-2020.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Coverage Change
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<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	Group Long-Term Care Insurance		
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing		

<b>Comments:</b>	Please see attached the
<b>Attachment(s):</b>	Generic Group Cov Chg Form_1-2020.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	NAIC Transmittal Form
<b>Comments:</b>	Please see attached the NAIC Transmittal Form
<b>Attachment(s):</b>	Group NAIC Transmittal_PA.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Exhibits
<b>Comments:</b>	Please see attached the Act Memo Exhibits
<b>Attachment(s):</b>	2019_Group_ActMemo_LossRatio - PA(Exhibits).xlsx 2019 Group ActMemo LossRatio PA (Exhibits).pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>SERFF Tracking #:</b>	META-132350262	<b>State Tracking #:</b>	META-132350262	<b>Company Tracking #:</b>	CT20-82 GROUP HIPPA (RATE) CL
<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	Metropolitan Life Insurance Company		
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified				
<b>Product Name:</b>	Group Long-Term Care Insurance				
<b>Project Name/Number:</b>	2020 Group Rate Increase Filings /CT20-82 Group HIPAA Rate Filing				

**Attachment 2019\_Group\_ActMemo\_LossRatio - PA(Exhibits).xlsx is not a PDF document and cannot be reproduced here.**

Metropolitan Life Insurance Company  
1300 Hall Boulevard  
Bloomfield, CT 06002  
Tel 860-656-3813 Fax 860-656-3815  
Treilly1@metlife.com



**Thomas G. Reilly**  
Assistant Vice President  
Product Management & Compliance

April 23, 2020

Pennsylvania Insurance Department  
1326 Strawberry Square, 13<sup>th</sup> Floor  
Harrisburg, Pennsylvania 17120

Re: Group Long-Term Care Insurance – Premium Rate Schedule Increase Filing  
Our NAIC Company No. is 65978  
Our FEIN is 13-5581829

Dear Sir/Madam:

We are filing, for your review and approval, a request for a 6.82% premium rate schedule increase with respect to certain group long-term care insurance policies issued for delivery (sitused) in your state before July 1, 2010.

Please note that the requested increase will not apply to any group long-term care insurance policy issued with rates that were based on the prospective premium rate schedule increase that was approved by your Department (those group long-term care insurance policies were issued on or after July 1, 2010).

Per the discussion on December 31, 2019 with Jim Lavery (Pennsylvania Insurance Department), Tom Reilly and Deb Fountas (Metropolitan Life Insurance Company("MetLife")), MetLife had previously implemented a 45% rate increase in 2011.

We will only implement the premium rate schedule increase after we have received approval from your Department and will apply the increase to all certificates issued under group long-term care insurance policies sitused in your state except those certificates issued to residents of other states whose requirements are asserted to apply to rate increases for certificates issued in such other states regardless of group policy situs. As to certificates issued in any such other state, we will implement the increase approved by that state, regardless of whether or not you approved this request.

The premium rate schedule increase for which we are seeking approval will apply to the following group long-term care insurance policy forms:

- GPNP99-LTC approved by your Department on July 17, 2000 and certificates issued thereunder; and
- G.LTC6997 approved by your Department on January 26, 1999 and certificates issued thereunder.

Please note that these forms are currently not being marketed.

We are submitting an actuarial memorandum and rates in support of our request.

#### **Company Rate Information Provided on SERFF**

Please note the following with respect to the information entered under Company Rate Information in the SERFF system:

“Written Premium Change for this Program” and “Written Premium for this Program” only reflects premium information for certificates issued to residents of your state under group policies issued from within and from outside of your state.

The “# of Policyholders Affected for this Program” only reflects the number of certificates issued to residents of your state under group policies issued in and outside of your state.

### **Notification to Certificateholders of Premium Rate Schedule Increase**

We intend to provide certificateholders with a minimum of 60 days advance written notice prior to the first effective date of the premium rate schedule increase. In our written notification we will explain that:

- The amount of the increase requested in this filing and the amount of the increase approved by your Department;
- If the full amount of the requested increase is approved by your Department, a statement that the certificate may be subject to rate increases in the future. If the amount of the increase approved by your Department is less than the amount requested in this filing, the notice will include the same statement and may include an additional statement about the likelihood of MetLife making future rate increase requests on the certificate. The wording of this additional statement will depend on the degree of variance from the amount requested;
- The current premium rate and the premium rate after the increase is applied;
- A statement that the premium rate adjustment will be effective on the certificate’s premium due date.
- The following options available to the certificateholder:
  1. the certificateholder can continue his/her current coverage by paying the new premium amount when due;
  2. the certificateholder can reduce his/her coverage to lessen the impact of the premium rate schedule increase if the current level of coverage permits a reduction;
  3. if the certificateholder’s coverage lapses (due to nonpayment of premium or cancellation) at any time from the date of our written notification up to 120 days following the first due date of the new premium (“Election Period”), that the certificateholder will have nonforfeiture coverage as follows:
    - a. if the certificateholder’s coverage does not include a nonforfeiture feature we will issue the certificateholder the Limited Coverage Upon Lapse Following Premium Increase Endorsement (“LCUL”) described below;
    - b. if the certificateholder’s coverage includes a nonforfeiture feature, but that feature will provide no benefit or a lower benefit than LCUL (as determined by us), we will issue the certificateholder LCUL and pay benefits under LCUL rather than the nonforfeiture feature included in the certificateholder’s coverage;
    - c. if the certificateholder’s coverage includes a nonforfeiture feature that will pay benefits equal to or greater than LCUL (as determined by us), we will provide nonforfeiture coverage under the feature already included in the certificateholder’s coverage;
    - d. if the certificateholder’s coverage includes a nonforfeiture feature that will pay benefits that are different than the benefits provided under LCUL such that we determine that it would be appropriate to provide the certificateholder with a choice of retaining their existing nonforfeiture feature or electing LCUL, we will present LCUL as an option that the certificateholder can elect instead of the nonforfeiture feature included in the certificate. In this scenario, LCUL will only be issued and applied if specifically elected by the certificateholder instead of the nonforfeiture feature included in his/her certificate;

- e. if the certificateholder qualifies for coverage under Contingent Benefit Upon Lapse as a result of the premium rate schedule increase, we will instead provide coverage under LCUL since the benefit payable under LCUL is equal to the benefit payable under Contingent Benefit Upon Lapse.

We will not provide coverage under more than one feature that provides for a nonforfeiture benefit.

We have included a copy of our certificateholder notification letter and coverage change form for informational purposes.

#### **Limited Coverage Upon Lapse Following Premium Increase Endorsement**

In connection with our request for approval of a premium rate schedule increase, we are extending the use of the following forms, which were previously acknowledged by your Department on 10/12/11. Please refer to the section above titled Notification to Certificateholders of Premium Rate Schedule Increase for additional information on how we intend to use these forms.

Form Number:	Description:
G.LCUL	LIMITED COVERAGE UPON LAPSE FOLLOWING PREMIUM INCREASE ENDORSEMENT. Endorsement to be issued to certificateholders whose coverage lapsed during the Election Period (described above) and (1) whose policies did not include a nonforfeiture benefit; or (2) who qualified for Contingent Benefit Upon Lapse as a result of the premium rate schedule increase.
G.LCUL-1	LIMITED COVERAGE UPON LAPSE FOLLOWING PREMIUM INCREASE ENDORSEMENT. Endorsement to be issued to certificateholders whose coverage lapsed during the Election Period (described above) and whose policies included a nonforfeiture benefit that did not provide a benefit equal to or greater than that provided by the LCUL.
G.LCUL-2	LIMITED COVERAGE UPON LAPSE FOLLOWING PREMIUM INCREASE ENDORSEMENT. Endorsement to be issued to certificateholders whose coverage lapsed during the Election Period (described above) and whose policies included a nonforfeiture benefit that will pay benefits different than the benefits provided under LCUL and who chose LCUL instead of the nonforfeiture benefit included in their coverage.

The contact person for this filing is:

Deborah Fountas  
1300 Hall Boulevard  
Bloomfield, CT 06002  
Telephone: 860-656-3808  
dfountas@metlife.com

Thank you for your attention to our filing. We look forward to hearing from you.

Sincerely,



Thomas G. Reilly  
Assistant Vice President  
Product Management & Compliance

Metropolitan Life Insurance Company  
1300 Hall Boulevard, Bloomfield, CT 06002  
Email: [mark.newton@metlife.com](mailto:mark.newton@metlife.com)



**Mark D. Newton, FSA, MAAA**

April 22, 2020  
Pennsylvania Department of Insurance

Re: GPNP99-LTC, G.LTC197  
Issued by Metropolitan Life Insurance Company (MetLife)

Attached is the filing for the captioned forms. This letter provides an overview of the filing and notes on some of the content. After a careful review of earlier filings, we have endeavored to reflect in this filing additional content based on previous questions submitted by your Department. Hopefully, this will make your review easier and more effective.

#### Filing Overview

In addition to this overview, this filing consists of the Actuarial Memorandum and Attachments on specific aspects of the Pennsylvania Administrative Code as well as supporting data based on earlier reviews. These documents are outlined and summarized here for your convenience.

Title	Description
<b>Actuarial Memorandum</b> Exhibit I-A	Lifetime Loss Ratio ("LLR") <ul style="list-style-type: none"><li>• <i>Nationwide</i> experience</li><li>• Without/with proposed rate increase of 6.82%</li><li>• Weighted average statutory rate 4.47%</li></ul> LLR without rate increase – 99.4% LLR with rate increase – 97.4%
Exhibit II-A	Demonstration of rate action meeting Rate Stability (58/85) limitations
Exhibit I-B	Lifetime Loss Ratio ("LLR") <ul style="list-style-type: none"><li>• <i>Pennsylvania</i> experience</li><li>• Without/with proposed rate increase of 6.82%</li><li>• Weighted average statutory rate 4.47%</li></ul> LLR without rate increase – 97.2% LLR with rate increase – 95.1%
Exhibit II-B	Demonstration of rate action meeting Rate Stability (58/85) limitations
<b>Review of Prior Correspondence</b>	Attachment 1 – Assumptions Summary Attachment 2 – A/E Ratios (Calendar Year) Attachment 3 – A/E Ratios (Policy Duration) Attachment 4 – A/E Ratios (Lapse, Mortality, Incidence, Claim Termination) Attachment 9-A – <i>Nationwide</i> Lifetime Loss Ratio with Earned Premium and Paid Claims Attachment 9-A – <i>Pennsylvania</i> Lifetime Loss Ratio with Earned Premium and Paid Claims

	Attachment 16 – <i>Nationwide</i> Lifetime Loss Ratio at Initial Rates Since Inception Attachment 19 – <i>Nationwide</i> Reserve Experience
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#### Rationale for the Rate Increase Request

Exhibit I demonstrates that the combination of historical and projected experience using the most recent Best Estimate assumptions (with or without a margin for adverse deviation) is clearly far beyond the expected loss ratio using the original pricing assumptions. Attachments 2 and 3 support the development of the experience by analyzing the Actual-to-Expected Ratios by Calendar Year and Policy Duration.

Attachment 1 compares the development of the changes in assumptions from the time of original pricing to the latest Experience Study. Generally, worse than expected morbidity and lower decrements are the primary reasons for the rate action.

#### Assumption Setting and Review

All projection assumptions are based on the Experience Study performed each year. In general, the assumptions used in all projections are those that reproduce historical experience within a non-material degree of tolerance. Attachment 4 shows the Actual-to-Expected Ratios comparing the latest Best Estimate assumptions with the set of actual experience for Lapse, Mortality, Incidence, and Claim Termination.

Some actuarial judgment is used in areas where credibility or trending requires adjustment. In any case, the methodology, results, conclusions and use are prescribed by MetLife internal Standards and Actuarial Standards of Practice and are reviewed and approved by MetLife management, internal auditors, and external auditors.

#### Calculation of the Rate Request

MetLife's evaluation of the Justifiable Rate Increase ("JRI") uses the industry standard "If Knew" basis. This method calculates the premium needed at time zero to achieve the original loss ratio if all current experience had been known at inception. Of course, the Company cannot retroactively charge such premiums, so all historical losses stemming from past premium shortfalls are taken by the Company.

#### Additional Notes

MetLife requests the rate action based on deviations from anticipated experience outlined in the Actuarial Memorandum and the supporting attachments. Lifetime Loss Ratios exceed all minimum requirements in Pennsylvania as well as the application of rate stability standards even at the full requested rate action. In addition, though Pennsylvania-only experience is not necessarily credible, the LLR's still meet the standards above at the full rate action level.

Despite the rate action requested, the experience of the block does not fully return to pricing levels. In general, the rate action restricts consideration of recovering historical losses by focusing on lifetime experience. We will continue, of course, to analyze and adjust experience assumptions and reserve the right to update those in the future along with requesting any resulting changes in premium rates.

The actuarial justification for experience analysis and projections, including assumptions and methods, are reflective of the Code of Professional Conduct and applicable Actuarial Standards of Practice. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for preparing health rate filings and to render the actuarial opinion contained herein.

Thank you for your consideration. I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink that reads "Mark D. Newton". The script is fluid and cursive, with the first name "Mark" and last name "Newton" being clearly legible, and "D." serving as a middle initial.

Mark D. Newton, FSA, MAAA  
Actuarial Director, Metropolitan Life Insurance Company

# **METROPOLITAN LIFE INSURANCE COMPANY**

**New York, NY**

## **Actuarial Memorandum**

**April 22, 2020**

This actuarial memorandum pertains to long-term care insurance provided under group policies issued to cover eligible employees of an employer, and at the option of the employer, retirees and/or family members of eligible employees who meet eligibility requirements.

### **Policy Forms**

The premium rate schedule increase for which we are seeking approval will apply to the following group long-term care insurance policy forms:

- GPNP99-LTC approved by your Department and certificates issued thereunder
- G.LTC197 approved by your Department and certificates issued thereunder

### **1. Purpose of Filing**

This actuarial memorandum has been prepared for the purpose of demonstrating that the anticipated loss ratio standard of this product meets the minimum requirements of your state and may not be suitable for other purposes.

### **2. Description of Benefits**

The group policy forms listed above provide either comprehensive or facilities only coverage. Benefits under the group long-term care policies are payable if an insured is unable to perform a certain number of activities of daily living or suffers cognitive impairment in accordance with the applicable terms and conditions of the group policy. There are optional benefits, including, but not limited to, nonforfeiture and inflation protection.

### **3. Renewability**

These policy forms are guaranteed renewable for life.

### **4. Applicability**

This filing is applicable to inforce group long-term care insurance policies issued for delivery (situated) in your state, *except those certificates issued to residents of other states whose requirements are asserted to apply to rate increases for certificates issued in such other states regardless of group policy situs.*

These forms are not currently being marketed to new group policyholders.

# METROPOLITAN LIFE INSURANCE COMPANY

New York, NY

## Actuarial Memorandum

April 22, 2020

### 5. Actuarial Assumptions

- a. Expected Claim Costs are the product of attained age frequency rates and continuance curves, adjusted by utilization factors and underwriting selection factors based on actual experience through June 30, 2018.
- b. Voluntary Termination Rates vary by issue age and duration as developed from actual experience through June 30, 2018 and are shown in the following table:

Duration	Issue Age					
	Under 40	40 to 44	45 to 49	50 to 54	55 to 59	over 59
1	15.6%	10.2%	7.6%	6.5%	6.1%	3.3%
2	12.3%	7.6%	5.8%	4.7%	3.9%	2.9%
3	10.0%	7.3%	5.4%	4.9%	3.7%	2.2%
4	7.9%	5.7%	4.1%	3.5%	2.9%	2.0%
5	7.1%	5.1%	3.8%	3.3%	2.6%	1.5%
6	5.0%	3.4%	3.1%	2.3%	2.1%	1.4%
7	5.0%	3.4%	3.1%	2.3%	2.1%	1.4%
8	4.0%	2.6%	2.4%	2.1%	1.3%	1.3%
9	4.0%	2.6%	2.4%	2.1%	1.3%	1.3%
10	4.0%	2.6%	2.4%	2.1%	1.3%	1.3%
11	4.4%	2.6%	2.0%	0.9%	1.0%	1.0%
12	4.4%	2.6%	2.0%	0.9%	1.0%	1.0%
*13+	1.8%	1.3%	1.0%	0.8%	0.7%	0.7%

\*After duration 13, grade down to 0.7% by attained age 65 where applicable

In the year of rate increase implementation, it is assumed that an additional 0.9% of policies lapse. There is no adverse selection assumed due to the additional lapse rates.

- c. Mortality 97% of Annuity 2000 Basic Table with selection consistent with experience.
- d. Expenses Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

The above assumptions are based on actual inforce experience of MetLife and are deemed reasonable for these particular policy forms. The assumptions used in this filing were developed from the actual experience on these forms and supplemented, as needed, based on the experience of other forms.

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In establishing the assumptions described in this section, the policy design, underwriting, and claims adjudication practices for the above-referenced policy forms were taken into consideration.

### **6. Marketing Method**

These policy forms were issued to provide coverage to eligible employees and retirees pursuant to an employer's sponsored benefits package. Family members of eligible employees and retirees were also eligible. The typical marketing methods utilize direct mail and call center support.

### **7. Underwriting Description**

Several underwriting methods were used. These include Guaranteed Issue, Simplified Issue, and Full Underwriting. Guaranteed Issue applies only to those eligible employees who are actively at work. For those insureds that were not eligible for Guaranteed Issue, underwriting was performed by means of questions, including medical questions, and contacting health care providers for medical records as needed.

### **8. Premiums**

Premium rates are level premiums from the date of issue, while payable, except when Periodic or Optional Inflation Additions are taken. The rates for each group policy reflect the specific group's risk profile. Premiums vary by the age of the insured at issue, the plan design and payment mode/method.

### **9. Issue Age Range**

The minimum issue age for these forms was 18.

### **10. Area Factors**

Area factors are not used for this product.

### **11. Reserves**

Active life reserves have not been used in this rate increase analysis. Claim reserves as of December 31, 2018 have been discounted to the incurral date of each respective claim and included in historical incurred claims. Incurred but not reported reserve balances as of December 31, 2018 have been allocated to a calendar year of incurral and included in historical incurred claims.

### **12. Trend Assumptions**

As this is not medical insurance, we have not included any explicit medical cost trends in the projections.

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### **13. Past and Future Policy Experience**

Nationwide and Pennsylvania experience for all policy forms combined is shown in Exhibit I-A and I-B. Exhibit I-A normalizes the premium from all states to reflect the prior rate action approved by Pennsylvania rather than the prior rate action approved by other states. While the financial projections in Exhibit I include tax-qualified policy forms and other non-tax-qualified policy forms that were issued prior to the enactment of the Health Insurance Portability and Accountability Act (HIPAA), we are currently only requesting a rate increase on the tax-qualified policy forms listed above.

Historical experience is shown by claim incurral year. Claim payments and reserves were discounted to the mid-point of the year of incurral at the weighted average maximum valuation interest rate for contract reserves which is 4.47%. Incurred but not reported reserves were allocated based on a historical analysis of claim development pattern.

Annual loss ratios are calculated, with and without interest, as incurred claims divided by earned premiums.

A lifetime loss ratio as of December 31, 2018 is calculated as the sum of accumulated past experience and discounted future experience where accumulation and discounting occur at the weighted average maximum valuation interest rate for contract reserves, which is 4.47%.

### **14. Projected Earned Premiums and Incurred Claims**

Earned premiums for projection years 2019 through 2099 are developed by multiplying each prior period's earned premium (starting with December 31, 2018 actual earned premium) by a persistency factor. For a year in which the rate increase is effective, the earned premium prior to the increase is multiplied by 1 plus the rate increase percent and an effectiveness factor.

Each projection year claim amount is calculated by multiplying incidence, continuance and utilization factors by the policy and rider benefits on a seriatim basis.

Present and accumulated values in the lifetime projections in Exhibit I-A and I-B are determined at the average maximum valuation interest rate for contract reserves applicable to LTC business issued in the years in which the applicable business of this filing were issued. The maximum valuation interest rate averages 4.47%.

The assumptions used in the projections in Exhibit I-A and I-B are developed from the company's LTC insurance experience.

Projections in Exhibit II provide a demonstration that the sum of the accumulated value of incurred claims without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum of the following:

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1. Accumulated value of the initial earned premium times 58%;
2. 85% of the accumulated value of prior premium rate schedule increases;
3. Present value of future projected initial earned premium times 58% ; and
4. 85% of the present value of future projected premium in excess of the projected initial earned premium.

### 15. History of Previous Inforce Rate Increases

Round	Authorized %	Authorization Date	Implementation Date
1	45%	9/22/2011	5/1/2012

The experience and projections in Exhibit I-A have been restated to reflect a rate level similar to that approved in Pennsylvania on a nationwide basis.

### 16. Requested Rate Increase

The company is requesting an increase of 6.82% for the policy forms listed above. Corresponding rate tables reflecting the 6.82% increase are included with this filing. Please note that the actual rates implemented may vary slightly from those filed due to implementation rounding algorithms.

### 17. Analysis Performed

The initial premium schedule was based on pricing assumptions believed to be appropriate, given the information available at the time the initial rate schedule was developed. The original pricing assumptions for claim costs, voluntary termination rates, mortality, and interest were as follows:

- a. Incidence and continuance rates for nursing home care were based on a study published by the Society of Actuaries based on the 1985 NNHS with modifications. Home health care incidence and continuance rates were based on the nursing home care rates with modifications.
- b. Voluntary termination rates by duration were assumed to be 5.5% in year one, grading down to 4.5% in year ten and thereafter.
- c. Mortality was based on the 1983 Group Annuity Mortality Table, adjusted to remove loading. These rates vary by age and sex.

As part of the inforce management of the business, MetLife monitors the performance of the business by completing periodic analyses of lapse rates, mortality rates, claim incidence rates, claim continuance rates and claim utilization rates. The findings from these analyses were used to determine the current experience assumptions on a best estimate basis. A margin for moderately adverse experience equal to 10% of projected future incurred claims was added to the best estimate assumptions. A model of this business was developed for use in the cash flow testing that is part of

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the company's annual statutory reporting requirements. Using this model, a future projection of these policies under the moderately adverse experience assumptions was performed and the projected lifetime loss ratio for these policies was determined. For these policies, the past experience and future projections based on current experience assumptions, plus a margin of adverse deviation, combine to a resulting loss ratio that far exceeds both original pricing expectations and state minimum requirements.

Similar analyses were done for the prior premium rate increases. Since then, actual voluntary lapse rates have been lower than that assumed in the prior rate increases. Morbidity levels have been slightly worse than assumed in the prior rate increase.

The experience analysis, management's view of when a change to the original rate schedule may be considered and the seriatim inforce and claim data used in developing the projections in Exhibit I-A and I-B have been relied upon by the actuary in the development of this memorandum.

### **18. Loss Ratio Requirement Compliance Demonstration**

Projected experience assuming the increase is implemented is shown in Exhibit I-A and I-B. As shown in these exhibits, the expected lifetime loss ratio, with and without the requested rate increase, exceed the minimum requirements under rate stability regulations.

### **19. Average Annual Premium**

The average September 30, 2019 annualized premiums for all premium-paying certificates situated in Pennsylvania, before and after the current requested increase of 6.82% are:

Before increase:	\$1,514
After current requested 6.82% increase:	\$1,617

### **20. Proposed Effective Date**

The rate increase will become effective on the first day of the month following at least a 60 day advance written notification to the certificate holder.

### **21. Nationwide Distribution of Business as of September 30, 2019 (based on premium-paying certificates inforce count)**

By Issue Age:

<b>Issue Age</b>	<b>Percent</b>
<45	28%
45-49	17%

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50-54	21%
55-59	18%
60-64	10%
65-69	4%
70-74	1%
75+	0%
Total	100%

By Benefit Period:

Benefit Period (Days)	Percent
730	1%
1,095	15%
1,250	3%
1,460	1%
1,800	0%
1,825	66%
2,000	2%
2,190	2%
2,555	5%
2,920	4%
3,650	1%
5,000	0%
Lifetime	1%
Total	100%

By Inflation Option:

Inflation	Percent
Optional	95%
Auto	5%
Total	100%

By Home Care Percentage:

Home Care %	Percent
0% (FC Only)	11%
50%	35%
60%	33%

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65%	1%
70%	0%
75%	13%
80%	2%
100%	5%
Total	100%

By Gender:

Gender	Percent
Female	55%
Male	46%
Total	100%

### 22. Number of Certificateholders

As of September 30, 2019, the number of premium-paying certificates inforce situated in Pennsylvania and their premiums that will be affected by this increase are:

Effective Before Rate Stability Regulation Effective Date		Effective On or After Rate Stability Regulation Effective Date	
Number of Certificateholders	2019 Annualized Premium	Number of Certificateholders	2019 Annualized Premium
1,198	\$1,610,560	4,262	\$6,656,531

### 23. Actuarial Certification

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for preparing health rate filings and to render the actuarial opinion contained herein.

This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

I hereby certify that, to the best of my knowledge and judgment, this rate submission is in compliance with the applicable laws and regulations of Pennsylvania.

The projections contained in this actuarial memorandum are based on best estimate assumptions that reflect a margin for moderately adverse experience. I certify that (1) if the requested premium rate schedule increase is implemented and (2) unless underlying best estimate assumptions plus the moderately adverse conditions are realized, no further premium rate schedule increases are

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anticipated. Moderately adverse conditions are interpreted as those conditions where aggregate experience deviates unfavorably from the aggregate best estimate experience assumptions, such that the value of the deviation is equal to 10% of projected future incurred claims or more, or other conditions that result in a similar lifetime loss ratio.

I further certify that

- the analysis described in Section 17 of this memorandum was used in determining the need for a rate increase;
- the policy design, underwriting and claims adjudication practices have been taken into consideration in this rate increase request;
- the actuarial assumptions are appropriate and the gross premiums bear reasonable relationship to the benefits; and
- the relationship between renewal premium rate schedules and new business premium rate schedules is not applicable because we are no longer be marketing new business.



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Mark D. Newton, FSA, MAAA  
Actuarial Director, Metropolitan Life Insurance Company

**Exhibit I-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**

	Calendar Year	Loss Ratio Demonstration						Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors		
		Without Interest				With Interest		Premium		Benefit		Persistence Factors		Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor	
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistence			Premium Persistence
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%							4.47%	3.6378
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%							4.47%	3.4819
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%							4.47%	3.3328
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%							4.47%	3.1901
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%							4.47%	3.0534
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%							4.47%	2.9226
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%							4.47%	2.7975
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%							4.47%	2.6777
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%							4.47%	2.5630
	1998	43,940,449	7,714,265	17.6%	82,595	107,794,308	18,924,565	17.6%							4.47%	2.4532
	1999	49,097,051	19,963,200	41.5%	85,693	112,937,587	46,875,964	41.5%							4.47%	2.3481
	2000	55,598,283	16,502,514	29.7%	111,642	124,959,751	37,090,176	29.7%							4.47%	2.2475
	2001	66,614,492	24,068,185	36.1%	138,474	143,306,604	51,777,469	36.1%							4.47%	2.1513
	2002	76,962,588	25,845,554	33.6%	154,041	158,476,862	53,219,655	33.6%							4.47%	2.0591
	2003	84,734,429	28,607,127	33.8%	161,514	167,007,058	56,383,127	33.8%							4.47%	1.9709
	2004	93,549,570	29,417,990	31.4%	177,688	176,484,037	55,497,910	31.4%							4.47%	1.8865
	2005	106,389,491	35,602,802	33.5%	193,671	192,110,489	64,288,978	33.5%							4.47%	1.8057
	2006	121,561,825	36,875,172	30.3%	207,903	210,105,912	63,734,578	30.3%							4.47%	1.7284
	2007	132,858,561	46,491,291	35.0%	211,594	219,795,765	76,913,289	35.0%							4.47%	1.6544
	2008	138,403,077	54,716,840	39.5%	211,070	219,161,487	86,644,201	39.5%							4.47%	1.5835
	2009	141,341,445	50,240,716	35.5%	199,029	214,228,247	76,148,794	35.5%							4.47%	1.5157
2010	141,989,582	48,415,921	34.1%	193,053	205,992,943	70,239,938	34.1%							4.47%	1.4508	
2011	142,889,041	54,545,282	38.2%	187,553	198,419,139	75,742,883	38.2%							4.47%	1.3886	
2012	142,013,255	62,091,189	43.7%	178,477	188,756,638	82,528,381	43.7%							4.47%	1.3291	
2013	162,863,192	63,646,086	39.1%	170,629	207,197,738	80,971,795	39.1%							4.47%	1.2722	
2014	189,092,342	70,214,415	37.1%	165,636	230,263,300	85,502,156	37.1%							4.47%	1.2177	
2015	187,270,822	85,340,894	45.6%	160,865	218,277,590	99,471,046	45.6%							4.47%	1.1656	
2016	187,556,911	95,493,013	50.9%	156,155	209,247,985	106,536,839	50.9%							4.47%	1.1157	
2017	186,345,406	124,213,565	66.7%	151,817	198,992,000	132,643,494	66.7%							4.47%	1.0679	
2018	180,833,741	140,540,754	77.7%	147,355	184,835,382	143,650,758	77.7%							4.47%	1.0221	
Projected Future Experience	2019	179,854,405	134,979,417	75.0%	145,653	175,960,601	132,057,145	75.0%	1.4356	N/A	0.0122	N/A	0.988	0.995	4.47%	0.9784
	2020	172,545,082	144,912,977	84.0%	143,936	161,579,276	135,703,282	84.0%	1.4356	N/A	0.0112	N/A	0.989	0.959	4.47%	0.9364
	2021	165,276,344	155,042,377	93.8%	141,622	148,143,460	138,970,368	93.8%	1.4356	N/A	0.0161	N/A	0.984	0.958	4.47%	0.8963
	2022	158,038,299	165,545,413	104.8%	140,234	135,588,498	142,029,204	104.8%	1.4356	N/A	0.0098	N/A	0.990	0.956	4.47%	0.8579
	2023	150,802,397	176,551,435	117.1%	138,939	123,839,007	144,984,131	117.1%	1.4356	N/A	0.0092	N/A	0.991	0.954	4.47%	0.8212
	2024	143,533,323	188,099,230	131.0%	137,694	112,821,189	147,851,233	131.0%	1.4356	N/A	0.0090	N/A	0.991	0.952	4.47%	0.7860
	2025	136,230,454	200,133,440	146.9%	136,495	102,494,568	150,572,724	146.9%	1.4356	N/A	0.0087	N/A	0.991	0.949	4.47%	0.7524
	2026	128,853,454	212,548,270	164.8%	135,320	92,864,202	153,063,957	164.8%	1.4356	N/A	0.0086	N/A	0.991	0.947	4.47%	0.7201
	2027	121,857,781	225,146,784	185.1%	134,175	83,857,897	155,192,177	185.1%	1.4356	N/A	0.0085	N/A	0.991	0.943	4.47%	0.6885
	2028	114,394,123	237,971,315	208.0%	133,053	75,473,850	157,006,417	208.0%	1.4356	N/A	0.0084	N/A	0.992	0.940	4.47%	0.6598
	2029	107,265,394	250,810,517	233.8%	131,949	67,739,368	158,389,815	233.8%	1.4356	N/A	0.0083	N/A	0.992	0.938	4.47%	0.6315
	2030	100,216,491	263,449,743	262.9%	130,844	60,577,230	159,245,805	262.9%	1.4356	N/A	0.0084	N/A	0.992	0.934	4.47%	0.6045
	2031	93,279,467	275,330,380	295.6%	129,759	53,969,077	159,530,438	295.6%	1.4356	N/A	0.0083	N/A	0.992	0.931	4.47%	0.5786
	2032	86,502,095	287,376,392	332.2%	128,634	47,904,276	159,147,104	332.2%	1.4356	N/A	0.0087	N/A	0.991	0.927	4.47%	0.5538
	2033	79,874,951	298,176,293	373.3%	127,506	42,339,622	158,055,451	373.3%	1.4356	N/A	0.0088	N/A	0.991	0.923	4.47%	0.5301
	2034	73,419,231	307,844,461	419.3%	126,339	37,250,741	156,191,152	419.3%	1.4356	N/A	0.0092	N/A	0.991	0.919	4.47%	0.5074
	2035	67,195,282	315,998,872	470.3%	125,087	32,632,668	153,461,462	470.3%	1.4356	N/A	0.0099	N/A	0.990	0.915	4.47%	0.4856
	2036	61,196,639	322,439,051	526.9%	123,802	28,446,582	149,882,231	526.9%	1.4356	N/A	0.0103	N/A	0.990	0.911	4.47%	0.4648
	2037	55,446,846	327,292,319	590.3%	122,405	24,669,939	145,622,017	590.3%	1.4356	N/A	0.0113	N/A	0.989	0.906	4.47%	0.4449
	2038	50,017,876	330,293,108	660.4%	120,940	21,301,255	140,662,864	660.4%	1.4356	N/A	0.0120	N/A	0.988	0.902	4.47%	0.4259
	2039	44,896,939	331,044,062	737.3%	119,390	18,301,446	134,274,737	737.3%	1.4356	N/A	0.0128	N/A	0.987	0.898	4.47%	0.4076
2040	40,100,900	329,556,826	821.8%	117,631	15,646,294	128,584,223	821.8%	1.4356	N/A	0.0147	N/A	0.985	0.893	4.47%	0.3902	
2041	35,638,286	326,050,406	914.9%	115,814	13,309,536	121,767,344	914.9%	1.4356	N/A	0.0155	N/A	0.985	0.889	4.47%	0.3735	
2042	31,510,732	320,644,871	1017.6%	113,879	11,264,017	114,619,656	1017.6%	1.4356	N/A	0.0167	N/A	0.983	0.884	4.47%	0.3575	
2043	27,717,491	313,388,572	1130.7%	111,825	9,483,688	107,227,622	1130.7%	1.4356	N/A	0.0180	N/A	0.982	0.880	4.47%	0.3422	
2044	24,254,172	304,437,745	1255.2%	109,791	7,943,258	99,703,575	1255.2%	1.4356	N/A	0.0182	N/A	0.982	0.875	4.47%	0.3275	
2045	21,112,367	293,941,395	1392.3%	107,616	6,618,169	92,142,862	1392.3%	1.4356	N/A	0.0198	N/A	0.980	0.870	4.47%	0.3135	
2046	18,280,565	282,098,762	1543.2%	105,360	5,485,034	84,642,960	1543.2%	1.4356	N/A	0.0210	N/A	0.979	0.866	4.47%	0.3000	
2047	15,743,943	269,053,633	1708.9%	103,045	4,521,597	77,271,126	1708.9%	1.4356	N/A	0.0220	N/A	0.978	0.861	4.47%	0.2872	
2048	13,485,726	255,126,266	1891.8%	100,496	3,707,161	70,132,976	1891.8%	1.4356	N/A	0.0247	N/A	0.975	0.857	4.47%	0.2749	
2049	11,488,614	240,446,363	2092.9%	97,813	3,022,898	63,266,531	2092.9%	1.4356	N/A	0.0267	N/A	0.973	0.852	4.47%	0.2631	
2050	9,734,896	225,260,499	2313.9%	94,914	2,451,748	56,732,192	2313.9%	1.4356	N/A	0.0296	N/A	0.970	0.847	4.47%	0.2519	
2051	8,204,526	209,824,719	2557.4%	91,821	1,977,820	50,581,289	2557.4%	1.4356	N/A	0.0326	N/A	0.967	0.843	4.47%	0.2411	
2052	6,877,171	194,286,488	2825.1%	88,307	1,586,835	44,829,568	2825.1%	1.4356	N/A	0.0383	N/A	0.962	0.838	4.47%	0.2307	
2053	5,732,558	178,809,370	3119.2%	84,247	1,266,074	39,491,255	3119.2%	1.4356	N/A	0.0460	N/A	0.954	0.834	4.47%	0.2209	
2054	4,752,635	163,626,550	3442.9%	80,209	1,004,694	34,590,207	3442.9%	1.4356	N/A	0.0479	N/A	0.952	0.829	4.47%	0.2114	
2055	3,919,684	148,845,570	3797.4%	76,200	793,120	30,117,853	3797.4%	1.4356	N/A	0.0500	N/A	0.950	0.825	4.47%	0.2019	
2056	3,215,464	134,596,659	4185.9%	72,062	622,760	26,068,203	4185.9%	1.4356	N/A	0.0543	N/A	0.946	0.820	4.47%	0.1937	
2057	2,623,337	121,019,745	4613.2%	66,630	4											

**Exhibit I-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 6.82% Future Increase**

	Calendar Year	Loss Ratio Demonstration						Factors Derived from Projected Values for Illustrative Purposes Only							Interest Rate Factors	
		Without Interest			With Interest			Premium		Persistence Factors		Persistence Factors			Calendar Year	Mid-Year
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency	Effective In Rate	Disc / Accum Factor
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%							4.47%	3.6378
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%							4.47%	3.4819
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%							4.47%	3.3328
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%							4.47%	3.1901
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%							4.47%	3.0534
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%							4.47%	2.9226
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%							4.47%	2.7975
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%							4.47%	2.6777
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%							4.47%	2.5630
	1998	43,940,449	7,714,265	17.6%	82,595	107,794,308	18,924,565	17.6%							4.47%	2.4532
	1999	49,097,051	19,963,200	41.5%	95,693	112,937,587	46,875,964	41.5%							4.47%	2.3481
	2000	55,598,283	16,502,514	29.7%	111,642	124,959,751	37,090,176	29.7%							4.47%	2.2475
	2001	66,614,492	24,068,185	36.1%	138,474	143,306,604	51,777,469	36.1%							4.47%	2.1513
	2002	76,962,588	25,845,554	33.6%	154,041	158,476,862	53,219,655	33.6%							4.47%	2.0591
	2003	84,734,429	28,607,127	33.8%	161,514	167,007,058	56,383,127	33.8%							4.47%	1.9709
	2004	93,549,570	29,417,990	31.4%	177,688	176,484,037	55,497,910	31.4%							4.47%	1.8865
	2005	106,389,491	35,602,802	33.5%	193,671	192,110,489	64,288,978	33.5%							4.47%	1.8057
	2006	121,561,825	36,875,172	30.3%	207,903	210,105,912	63,734,578	30.3%							4.47%	1.7284
	2007	132,858,561	46,491,291	35.0%	211,594	219,795,765	76,913,289	35.0%							4.47%	1.6544
	2008	138,403,077	54,716,840	39.5%	211,070	219,161,487	86,644,201	39.5%							4.47%	1.5835
Projected Future Experience	2009	141,341,445	50,240,716	35.5%	199,029	214,228,247	76,148,794	35.5%							4.47%	1.5157
	2010	141,989,582	48,415,921	34.1%	193,053	205,992,943	70,239,938	34.1%							4.47%	1.4508
	2011	142,889,041	54,545,282	38.2%	187,553	198,419,139	75,742,883	38.2%							4.47%	1.3886
	2012	142,013,255	62,091,189	43.7%	178,477	188,756,638	82,528,381	43.7%							4.47%	1.3291
	2013	162,863,192	63,646,086	39.1%	170,629	207,197,738	80,971,795	39.1%							4.47%	1.2722
	2014	189,092,342	70,214,415	37.1%	165,636	230,263,300	85,502,156	37.1%							4.47%	1.2177
	2015	187,270,822	65,340,894	35.0%	160,865	218,277,590	99,471,046	45.6%							4.47%	1.1656
	2016	187,556,911	95,493,013	50.9%	156,155	209,247,985	106,536,839	50.9%							4.47%	1.1157
	2017	186,345,406	124,213,565	66.7%	151,817	198,992,000	132,643,494	66.7%							4.47%	1.0679
	2018	180,833,741	140,540,754	77.7%	147,355	184,835,382	143,650,758	77.7%							4.47%	1.0221
	2019	179,854,405	134,979,417	75.0%	145,563	175,960,601	132,057,145	75.0%	1.4356	1.00000	0.0122	1.0000	0.988	0.995	4.47%	0.9784
	2020	175,938,204	144,478,238	82.1%	143,504	164,756,754	135,296,172	82.1%	1.4683	1.00000	0.0141	0.9970	0.986	0.959	4.47%	0.9364
	2021	175,498,901	154,112,123	87.8%	140,772	157,297,363	138,136,546	87.8%	1.5335	1.00000	0.0190	0.9940	0.981	0.958	4.47%	0.8963
	2022	167,297,162	164,055,504	98.1%	138,972	143,532,113	140,750,942	98.1%	1.5335	1.00000	0.0128	0.9910	0.987	0.956	4.47%	0.8579
	2023	159,637,336	174,962,472	109.6%	137,689	131,094,264	143,679,274	109.6%	1.5335	1.00000	0.0092	0.9910	0.991	0.954	4.47%	0.8212
	2024	151,942,395	186,406,337	122.7%	136,455	119,430,954	146,520,572	122.7%	1.5335	1.00000	0.0090	0.9910	0.991	0.952	4.47%	0.7860
	2025	144,211,678	198,332,239	137.5%	135,266	108,499,336	149,217,570	137.5%	1.5335	1.00000	0.0087	0.9910	0.991	0.949	4.47%	0.7524
	2026	136,508,346	210,635,336	154.3%	134,103	98,304,765	151,686,382	154.3%	1.5335	1.00000	0.0086	0.9910	0.991	0.947	4.47%	0.7201
	2027	128,785,248	223,120,483	173.3%	132,967	88,770,813	153,795,447	173.3%	1.5335	1.00000	0.0085	0.9910	0.992	0.943	4.47%	0.6885
	2028	121,096,040	235,829,573	194.7%	131,855	79,895,576	155,593,359	194.7%	1.5335	1.00000	0.0084	0.9910	0.992	0.940	4.47%	0.6598
2029	113,549,666	248,553,222	218.9%	130,762	71,707,960	156,964,307	218.9%	1.5335	1.00000	0.0083	0.9910	0.992	0.938	4.47%	0.6315	
2030	106,087,794	261,078,695	246.1%	129,666	64,126,220	157,812,593	246.1%	1.5335	1.00000	0.0084	0.9910	0.992	0.934	4.47%	0.6045	
2031	98,744,357	273,248,807	276.7%	128,591	57,130,921	158,094,664	276.7%	1.5335	1.00000	0.0083	0.9910	0.992	0.931	4.47%	0.5786	
2032	91,569,924	284,790,005	311.0%	127,476	50,710,895	157,714,780	311.0%	1.5335	1.00000	0.0087	0.9910	0.991	0.927	4.47%	0.5538	
2033	84,554,521	295,492,706	349.5%	126,359	44,820,139	156,632,952	349.5%	1.5335	1.00000	0.0088	0.9910	0.991	0.923	4.47%	0.5301	
2034	77,720,585	305,073,861	392.5%	125,202	39,433,120	154,785,431	392.5%	1.5335	1.00000	0.0092	0.9910	0.991	0.919	4.47%	0.5074	
2035	71,131,998	313,154,882	440.2%	123,961	34,544,492	152,080,309	440.2%	1.5335	1.00000	0.0099	0.9910	0.990	0.915	4.47%	0.4856	
2036	64,781,918	319,537,100	493.3%	122,687	30,113,159	148,533,290	493.3%	1.5335	1.00000	0.0103	0.9910	0.990	0.911	4.47%	0.4648	
2037	58,695,266	324,346,688	552.6%	121,303	26,115,257	144,311,419	552.6%	1.5335	1.00000	0.0113	0.9910	0.989	0.906	4.47%	0.4449	
2038	52,948,233	327,320,470	618.2%	119,852	22,549,214	139,396,988	618.2%	1.5335	1.00000	0.0120	0.9910	0.988	0.902	4.47%	0.4259	
2039	47,527,280	328,064,666	690.3%	118,316	19,373,658	133,729,775	690.3%	1.5335	1.00000	0.0128	0.9910	0.987	0.898	4.47%	0.4076	
2040	42,450,259	326,590,815	769.3%	116,573	16,562,951	127,426,965	769.3%	1.5335	1.00000	0.0147	0.9910	0.985	0.893	4.47%	0.3902	
2041	37,726,198	323,115,953	856.5%	114,771	14,089,291	120,671,438	856.5%	1.5335	1.00000	0.0155	0.9910	0.985	0.889	4.47%	0.3735	
2042	33,356,826	317,759,088	952.6%	112,854	11,923,933	113,588,079	952.6%	1.5335	1.00000	0.0167	0.9910	0.983	0.884	4.47%	0.3575	
2043	29,341,343	310,568,075	1058.5%	110,819	10,039,302	106,262,573	1058.5%	1.5335	1.00000	0.0180	0.9910	0.982	0.880	4.47%	0.3422	
2044	25,675,132	301,697,805	1175.1%	108,803	8,408,624	98,806,243	1175.1%	1.5335	1.00000	0.0182	0.9910	0.982	0.875	4.47%	0.3275	
2045	22,349,260	291,295,922	1303.4%	106,647	7,005,903	91,313,577	1303.4%	1.5335	1.00000	0.0198	0.9910	0.980	0.870	4.47%	0.3135	
2046	19,351,554	279,559,873	1444.6%	104,412	5,806,381	83,881,174	1444.6%	1.5335	1.00000	0.0210	0.9910	0.979	0.866	4.47%	0.3000	
2047	16,666,321	266,632,150	1599.8%	102,117	4,786,501	76,575,685	1599.8%	1.5335	1.00000	0.0220	0.9910	0.978	0.861	4.47%	0.2872	
2048	14,275,894	252,830,130	1771.0%	99,591	3,924,349	69,501,779	1771.0%	1.5335	1.00000	0.0247	0.9910	0.975	0.857	4.47%	0.2749	
2049	12,161,688	239,282,346	1959.3%	96,933	3,199,998	62,697,132	1959.3%	1.5335	1.00000	0.0267	0.9910	0.973	0.852	4.47%	0.2631	
2050	10,305,226	223,233,155	2166.2%	94,059	2,595,387	56,221,603	2166.2%	1.5335	1.00000	0.0296	0.9910	0.970	0.847	4.47%	0.2519	
2051	8,685,198	207,936,296	2394.1%	90,994	2,093,693	50,126,057	2394.1%	1.5335	1.00000	0.0326	0.9910	0.967	0.843	4.47%	0.2411	
2052	7,280,078	192,537,910	2644.7%	87,512	1,679,802	44,426,102	2644.7%	1.5335	1.00000	0.0383	0.9910	0.962	0.838	4.47%	0.2307	
2053	6,068,406	177,200,085	2920.0%	83,489	1,340,248	39,135,834	2920.0%	1.5335	1.00000	0.0460	0.9910	0.954	0.834	4.47%	0.2209	
2054	5,031,073	162,153,931	3223.0%	79,488	1,063,555	34,378,896	3223.0%	1.5335	1.00000	0.0479	0.9910	0.952	0.829	4.47%	0.2114	
2055	4,14															

**Exhibit II-A**  
**Demonstration that Lifetime Incurred Claims with Requested Increase are**  
**Not Less than Lifetime Earned Premium with Prescribed Factors**

1	Accumulated value of initial earned premium	4,075,140,483	x	58%	=	2,363,581,480
2a	Accumulated value of earned premium	4,426,924,751				
2b	Accumulated value of prior premium rate schedule increases (2a-1)	351,784,268	x	85%	=	299,016,628
3	Present value of future projected initial earned premium	1,212,375,049	x	58%	=	703,177,529
4a	Present value of future projected premium	1,826,365,954				
4b	Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	613,990,905	x	85%	=	521,892,269
<b>5</b>	<b>Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b</b>					<b>3,887,667,906</b>
6a	Accumulated value of incurred claims without the inclusion of active life reserves					1,617,956,915
6b	Present value of future projected incurred claims without the inclusion of active life reserves					4,471,346,049
<b>7</b>	<b>Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b</b>					<b>6,089,302,964</b>
8	Test: 7 is not less than 5					TRUE

**Exhibit I-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases)**

		Loss Ratio Demonstration								Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors	
		Without Interest				With Interest				Premium Rate Increase Factor	Benefit Downgrade	Persistency Factors				Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio				Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency		
Historical Experience	1989	-	-	-	N/A	-	-	-	N/A							4.47%	3.6378
	1990	-	-	-	N/A	-	-	-	N/A							4.47%	3.4819
	1991	-	-	-	N/A	-	-	-	N/A							4.47%	3.3328
	1992	-	-	-	N/A	-	-	-	N/A							4.47%	3.1901
	1993	-	-	-	N/A	-	-	-	N/A							4.47%	3.0534
	1994	-	-	-	N/A	-	-	-	N/A							4.47%	2.9226
	1995	-	-	-	N/A	-	-	-	N/A							4.47%	2.7975
	1996	-	-	-	N/A	-	-	-	N/A							4.47%	2.6777
	1997	-	-	-	N/A	-	-	-	N/A							4.47%	2.5630
	1998	-	-	-	N/A	-	-	-	N/A							4.47%	2.4532
	1999	-	-	-	N/A	-	-	-	N/A							4.47%	2.3481
	2000	71,094	-	0.0%	324	166,936	-	0.0%								4.47%	2.2475
	2001	467,489	1,025	0.2%	1,468	1,050,703	2,304	0.2%								4.47%	2.1513
	2002	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%								4.47%	2.0591
	2003	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%								4.47%	1.9709
	2004	1,727,834	102,414	5.9%	4,005	3,405,469	201,853	5.9%								4.47%	1.8865
	2005	2,659,254	510,600	19.2%	5,075	5,016,761	963,262	19.2%								4.47%	1.8057
	2006	5,407,385	1,025,526	19.0%	7,965	9,764,266	1,851,821	19.0%								4.47%	1.7284
	2007	8,054,419	1,721,859	21.4%	8,115	13,921,156	2,976,039	21.4%								4.47%	1.6544
	2008	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%								4.47%	1.5835
	2009	8,468,091	1,991,171	23.5%	8,660	13,409,236	3,153,022	23.5%								4.47%	1.5157
	2010	8,649,057	4,830,675	55.9%	8,358	13,109,193	7,321,752	55.9%								4.47%	1.4508
	2011	8,397,434	1,575,434	18.8%	8,236	12,193,213	2,285,579	18.8%								4.47%	1.3886
	2012	8,220,240	1,879,657	22.9%	7,927	11,414,822	2,610,137	22.9%								4.47%	1.3291
	2013	7,831,661	2,996,055	38.3%	7,502	10,409,437	3,982,201	38.3%								4.47%	1.2722
	2014	8,670,849	2,599,794	30.0%	7,032	11,031,224	3,307,508	30.0%								4.47%	1.2177
	2015	9,869,254	3,042,819	30.8%	6,822	12,018,081	3,705,330	30.8%								4.47%	1.1656
	2016	9,562,284	24,136	0.3%	6,668	11,145,540	2,688,025	24.1%								4.47%	1.1157
	2017	9,351,568	3,319,052	35.5%	6,482	10,433,083	3,702,902	35.5%								4.47%	1.0679
	2018	9,183,735	4,147,150	45.2%	6,366	9,807,002	4,428,602	45.2%								4.47%	1.0221
	2018	8,834,882	3,140,941	35.6%	6,230	9,030,387	3,210,446	35.6%								4.47%	
Projected Future Experience	2019	8,699,916	5,131,721	59.0%	6,149	8,511,564	5,020,620	59.0%	1.4356	N/A		0.0131	N/A	0.987	0.985	4.47%	0.9784
	2020	8,318,096	5,505,550	66.2%	6,075	7,789,454	5,155,654	66.2%	1.4356	N/A		0.0119	N/A	0.988	0.956	4.47%	0.9364
	2021	7,940,325	5,909,952	74.4%	5,973	7,117,215	5,297,315	74.4%	1.4356	N/A		0.0169	N/A	0.983	0.955	4.47%	0.8963
	2022	7,560,271	6,336,830	83.8%	5,911	6,486,312	5,436,665	83.8%	1.4356	N/A		0.0102	N/A	0.990	0.952	4.47%	0.8579
	2023	7,184,617	6,805,740	94.7%	5,855	5,900,012	5,588,877	94.7%	1.4356	N/A		0.0096	N/A	0.990	0.950	4.47%	0.8212
	2024	6,809,792	7,309,505	107.3%	5,800	5,352,686	5,745,474	107.3%	1.4356	N/A		0.0094	N/A	0.991	0.948	4.47%	0.7860
	2025	6,434,126	7,837,834	121.8%	5,747	4,840,789	5,896,886	121.8%	1.4356	N/A		0.0091	N/A	0.991	0.945	4.47%	0.7524
	2026	6,064,942	8,364,361	138.0%	5,696	4,364,361	6,052,720	138.0%	1.4356	N/A		0.0089	N/A	0.991	0.943	4.47%	0.7201
	2027	5,703,221	9,008,492	158.0%	5,646	3,931,192	6,209,484	158.0%	1.4356	N/A		0.0088	N/A	0.991	0.940	4.47%	0.6893
	2028	5,351,349	9,648,933	180.3%	5,597	3,530,662	6,366,080	180.3%	1.4356	N/A		0.0087	N/A	0.991	0.938	4.47%	0.6598
	2029	5,009,499	10,315,846	205.9%	5,549	3,163,558	6,514,579	205.9%	1.4356	N/A		0.0085	N/A	0.992	0.936	4.47%	0.6315
	2030	4,675,896	10,993,163	235.1%	5,499	2,826,409	6,644,968	235.1%	1.4356	N/A		0.0090	N/A	0.991	0.933	4.47%	0.6045
	2031	4,350,735	11,674,061	268.3%	5,452	2,517,222	6,754,309	268.3%	1.4356	N/A		0.0086	N/A	0.991	0.930	4.47%	0.5786
	2032	4,034,431	12,338,726	305.8%	5,401	2,234,240	6,833,103	305.8%	1.4356	N/A		0.0094	N/A	0.991	0.927	4.47%	0.5538
	2033	3,727,094	12,987,309	348.5%	5,356	1,975,635	6,884,233	348.5%	1.4356	N/A		0.0083	N/A	0.992	0.924	4.47%	0.5301
	2034	3,429,604	13,601,947	396.6%	5,300	1,740,079	6,901,224	396.6%	1.4356	N/A		0.0104	N/A	0.990	0.920	4.47%	0.5074
	2035	3,142,201	14,162,346	450.7%	5,247	1,525,976	6,877,791	450.7%	1.4356	N/A		0.0100	N/A	0.990	0.916	4.47%	0.4856
	2036	2,865,109	14,653,175	511.4%	5,195	1,331,814	6,811,366	511.4%	1.4356	N/A		0.0099	N/A	0.990	0.912	4.47%	0.4648
	2037	2,599,766	15,064,809	579.5%	5,142	1,156,713	6,702,778	579.5%	1.4356	N/A		0.0103	N/A	0.990	0.907	4.47%	0.4449
	2038	2,347,307	15,383,042	655.3%	5,086	999,654	6,551,220	655.3%	1.4356	N/A		0.0109	N/A	0.989	0.903	4.47%	0.4259
	2039	2,108,382	15,959,462	739.7%	5,028	859,445	6,357,215	739.7%	1.4356	N/A		0.0113	N/A	0.989	0.898	4.47%	0.4076
	2040	1,883,918	15,681,511	832.4%	4,967	735,054	6,118,504	832.4%	1.4356	N/A		0.0121	N/A	0.988	0.894	4.47%	0.3902
	2041	1,674,421	15,654,992	934.9%	4,905	625,332	5,846,540	934.9%	1.4356	N/A		0.0125	N/A	0.987	0.889	4.47%	0.3735
	2042	1,480,171	15,521,331	1048.6%	4,841	529,111	5,548,349	1048.6%	1.4356	N/A		0.0130	N/A	0.987	0.884	4.47%	0.3575
	2043	1,301,194	15,290,357	1175.1%	4,769	445,211	5,231,680	1175.1%	1.4356	N/A		0.0149	N/A	0.985	0.879	4.47%	0.3422
	2044	1,137,420	14,955,059	1314.8%	4,702	372,506	4,897,792	1314.8%	1.4356	N/A		0.0140	N/A	0.986	0.874	4.47%	0.3275
	2045	988,775	14,521,770	1468.7%	4,628	309,955	4,552,191	1468.7%	1.4356	N/A		0.0159	N/A	0.984	0.869	4.47%	0.3135
	2046	854,733	13,990,430	1636.8%	4,559	256,460	4,197,790	1636.8%	1.4356	N/A		0.0149	N/A	0.985	0.864	4.47%	0.3000
	2047	734,726	13,353,717	1817.5%	4,487	211,010	3,835,134	1817.5%	1.4356	N/A		0.0158	N/A	0.984	0.860	4.47%	0.2872
	2048	628,120	12,687,704	2019.9%	4,401	172,657	3,487,788	2019.9%	1.4356	N/A		0.0191	N/A	0.981	0.855	4.47%	0.2749
	2049	533,968	11,963,054	2240.4%	4,296	140,498	3,147,733	2240.4%	1.4356	N/A		0.0238	N/A	0.976	0.850	4.47%	0.2631
	2050	451,426	11,210,924	2483.4%	4,183	113,692	2,823,488	2483.4%	1.4356	N/A		0.0265	N/A	0.973	0.845	4.47%	0.2519
	2051	379,516	10,435,872	2749.8%	4,068	91,488	2,515,718	2749.8%	1.4356	N/A		0.0273	N/A	0.973	0.841	4.47%	0.2411
	2052	317,283	9,659,574	3044.5%	3,939	73,210	2,228,845	3044.5%	1.4356	N/A		0.0318	N/A	0.968	0.836	4.47%	0.2307
	2053	263,772	8,889,437	3370.1%	3,798	58,256	1,963,292	3370.1%	1.4356	N/A		0.0359	N/A	0.964	0.831	4.47%	0.2209
	2054	218,093	8,123,083	3725.7%	3,649	46,091	1,717,199	3725.7%	1.4356	N/A		0.0393	N/A	0.961	0.827	4.47%	0.2114
	2055	179,235	7,372,068	4113.1%	3,502	36,267	1,491,686	4113.1%	1.4356	N/A		0.0402	N/A	0.960	0.822	4.47%	0.2023
	2056	146,523	6,644,566	4534.8%	3,323	28,378	1,286,896	4534.8%	1.4356	N/A		0.0511	N/A	0.949	0.817	4.47%	0.1937
	2057	119,099	5,949,066	4995.1%	3,099	22,079	1,102,845	4995.1%	1.4356	N/A		0.0672	N/A	0.933	0.813	4.47%	0.1854
	2058	96,221	5,296,428	5504.4%	2,844	17,074	939,804	5504.4%	1.4356	N/A		0.0825	N/A	0.918	0.808	4.47%	0.177

**Exhibit I-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases) and With 6.83% Future Increase**

	Calendar Year	Loss Ratio Demonstration									Factors Derived from Projected Values for Illustrative Purposes Only							Interest Rate Factors	
		Without Interest				With Interest				Premium		Persistence Factors			Calendar Year		Mid-Year		
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistence	Premium Persistence	Effective In Rate	Disc / Accum Factor			
Historical Experience	1989	-	-	N/A	-	-	-	N/A							4.47%	3.6378			
	1990	-	-	N/A	-	-	-	N/A							4.47%	3.4819			
	1991	-	-	N/A	-	-	-	N/A							4.47%	3.3328			
	1992	-	-	N/A	-	-	-	N/A							4.47%	3.1901			
	1993	-	-	N/A	-	-	-	N/A							4.47%	3.0534			
	1994	-	-	N/A	-	-	-	N/A							4.47%	2.9226			
	1995	-	-	N/A	-	-	-	N/A							4.47%	2.7975			
	1996	-	-	N/A	-	-	-	N/A							4.47%	2.6777			
	1997	-	-	N/A	-	-	-	N/A							4.47%	2.5630			
	1998	-	-	N/A	-	-	-	N/A							4.47%	2.4532			
	1999	71,094	-	0.0%	324	166,936	-	0.0%							4.47%	2.3481			
	2000	467,489	1,025	0.2%	1,468	1,050,703	2,304	0.2%							4.47%	2.2475			
	2001	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%							4.47%	2.1513			
	2002	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%							4.47%	2.0591			
	2003	1,727,834	102,414	5.9%	4,005	3,405,469	201,853	5.9%							4.47%	1.9709			
	2004	2,659,254	510,600	19.2%	5,075	5,016,761	963,262	19.2%							4.47%	1.8865			
	2005	5,407,385	1,026,526	19.0%	7,964	9,764,266	1,851,821	19.0%							4.47%	1.8057			
	2006	8,054,419	1,721,859	21.4%	8,115	13,921,156	2,976,039	21.4%							4.47%	1.7284			
	2007	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%							4.47%	1.6544			
	2008	8,468,091	1,991,171	23.5%	8,660	13,409,236	3,153,022	23.5%							4.47%	1.5835			
2009	8,649,057	4,830,675	55.9%	8,358	13,109,193	7,321,752	55.9%							4.47%	1.5157				
2010	8,397,807	1,575,434	18.8%	8,236	12,183,213	2,285,579	18.8%							4.47%	1.4508				
2011	8,220,240	2,220,622	27.1%	7,927	11,414,822	2,610,137	22.9%							4.47%	1.3886				
2012	7,831,661	2,996,055	38.3%	7,502	10,409,437	3,982,201	38.3%							4.47%	1.3291				
2013	8,670,849	2,599,794	30.0%	7,032	11,031,224	3,307,508	30.0%							4.47%	1.2722				
2014	9,869,254	3,042,819	30.8%	6,822	12,018,081	3,705,330	30.8%							4.47%	1.2177				
2015	9,562,284	2,306,183	24.1%	6,688	11,145,540	2,688,025	24.1%							4.47%	1.1656				
2016	9,351,568	3,351,562	35.5%	6,482	10,433,083	3,702,902	35.5%							4.47%	1.1157				
2017	9,183,735	4,147,150	45.2%	6,366	9,807,002	4,428,602	45.2%							4.47%	1.0679				
2018	8,834,882	3,140,941	35.6%	6,230	9,030,387	3,210,446	35.6%							4.47%	1.0221				
Projected Future Experience	2019	8,699,916	5,131,721	59.0%	6,149	8,511,564	5,020,620	59.0%	1.4356	1.00000	0.0131	1.0000	0.987	0.985	4.47%	0.9784			
	2020	8,481,672	5,489,033	64.7%	6,057	7,942,634	5,140,187	64.7%	1.4683	1.00000	0.0149	0.9970	0.985	0.956	4.47%	0.9364			
	2021	8,430,964	5,874,493	69.7%	5,937	7,556,993	5,265,531	69.7%	1.5335	1.00000	0.0198	0.9940	0.980	0.955	4.47%	0.8963			
	2022	8,003,198	6,279,798	78.5%	5,858	6,866,321	5,387,735	78.5%	1.5335	1.00000	0.0132	0.9910	0.987	0.952	4.47%	0.8579			
	2023	7,605,537	6,744,488	88.7%	5,802	6,245,671	5,538,577	88.7%	1.5335	1.00000	0.0096	0.9910	0.990	0.950	4.47%	0.8212			
	2024	7,208,752	7,243,719	100.5%	5,747	5,666,280	5,693,765	100.5%	1.5335	1.00000	0.0094	0.9910	0.991	0.948	4.47%	0.7860			
	2025	6,811,077	7,767,294	114.0%	5,695	5,124,393	5,843,814	114.0%	1.5335	1.00000	0.0091	0.9910	0.991	0.945	4.47%	0.7524			
	2026	6,420,264	8,329,308	129.7%	5,644	4,623,472	5,998,246	129.7%	1.5335	1.00000	0.0089	0.9910	0.991	0.943	4.47%	0.7201			
	2027	6,037,351	8,927,416	147.9%	5,595	4,161,506	6,153,608	147.9%	1.5335	1.00000	0.0088	0.9910	0.991	0.940	4.47%	0.6893			
	2028	5,664,865	9,562,093	168.8%	5,546	3,737,510	6,308,785	168.8%	1.5335	1.00000	0.0087	0.9910	0.991	0.938	4.47%	0.6598			
	2029	5,302,986	10,223,003	192.8%	5,499	3,348,899	6,455,948	192.8%	1.5335	1.00000	0.0085	0.9910	0.992	0.936	4.47%	0.6315			
	2030	4,949,839	10,894,224	220.1%	5,450	2,991,998	6,585,163	220.1%	1.5335	1.00000	0.0090	0.9910	0.991	0.933	4.47%	0.6045			
	2031	4,605,628	11,568,994	251.2%	5,403	2,664,697	6,693,520	251.2%	1.5335	1.00000	0.0086	0.9910	0.991	0.930	4.47%	0.5786			
	2032	4,270,793	12,227,678	286.3%	5,352	2,365,136	6,771,605	286.3%	1.5335	1.00000	0.0094	0.9910	0.991	0.927	4.47%	0.5538			
	2033	3,945,451	12,870,423	326.2%	5,308	2,091,380	6,822,273	326.2%	1.5335	1.00000	0.0083	0.9910	0.992	0.924	4.47%	0.5301			
	2034	3,630,531	13,479,529	371.3%	5,253	1,842,024	6,839,113	371.3%	1.5335	1.00000	0.0104	0.9910	0.990	0.920	4.47%	0.5074			
	2035	3,326,290	14,034,885	421.9%	5,200	1,615,377	6,815,891	421.9%	1.5335	1.00000	0.0100	0.9910	0.990	0.916	4.47%	0.4856			
	2036	3,032,965	14,521,296	478.8%	5,149	1,409,840	6,750,064	478.8%	1.5335	1.00000	0.0099	0.9910	0.990	0.912	4.47%	0.4648			
	2037	2,752,076	14,929,226	542.5%	5,096	1,224,480	6,642,453	542.5%	1.5335	1.00000	0.0103	0.9910	0.990	0.907	4.47%	0.4449			
	2038	2,484,827	15,244,595	613.5%	5,040	1,058,220	6,492,259	613.5%	1.5335	1.00000	0.0109	0.9910	0.989	0.903	4.47%	0.4259			
	2039	2,231,904	15,455,103	692.5%	4,983	909,796	6,300,000	692.5%	1.5335	1.00000	0.0113	0.9910	0.989	0.898	4.47%	0.4076			
	2040	1,994,290	15,540,377	779.2%	4,923	778,118	6,063,438	779.2%	1.5335	1.00000	0.0121	0.9910	0.988	0.894	4.47%	0.3902			
	2041	1,772,519	15,514,097	875.3%	4,861	661,968	5,793,921	875.3%	1.5335	1.00000	0.0125	0.9910	0.987	0.889	4.47%	0.3735			
	2042	1,566,889	15,381,639	981.7%	4,798	560,110	5,498,414	981.7%	1.5335	1.00000	0.0130	0.9910	0.987	0.884	4.47%	0.3575			
	2043	1,377,426	15,152,744	1100.1%	4,726	471,294	5,184,594	1100.1%	1.5335	1.00000	0.0149	0.9910	0.985	0.879	4.47%	0.3422			
	2044	1,204,057	14,820,463	1230.9%	4,660	394,330	4,853,712	1230.9%	1.5335	1.00000	0.0140	0.9910	0.985	0.874	4.47%	0.3275			
	2045	1,046,704	14,391,074	1374.9%	4,586	328,114	4,511,222	1374.9%	1.5335	1.00000	0.0159	0.9910	0.984	0.869	4.47%	0.3135			
	2046	904,808	13,864,516	1532.3%	4,517	271,485	4,160,010	1532.3%	1.5335	1.00000	0.0149	0.9910	0.985	0.864	4.47%	0.3000			
	2047	777,771	13,233,533	1701.5%	4,446	223,373	3,800,618	1701.5%	1.5335	1.00000	0.0158	0.9910	0.984	0.860	4.47%	0.2872			
	2048	664,919	12,573,514	1891.0%	4,361	182,783	3,456,398	1891.0%	1.5335	1.00000	0.0191	0.9910	0.981	0.855	4.47%	0.2749			
2049	565,251	11,855,386	2097.4%	4,258	148,730	3,119,403	2097.4%	1.5335	1.00000	0.0238	0.9910	0.976	0.850	4.47%	0.2631				
2050	477,873	11,110,025	2324.9%	4,145	120,353	2,798,076	2324.9%	1.5335	1.00000	0.0265	0.9910	0.973	0.845	4.47%	0.2519				
2051	401,750	10,341,949	2574.2%	4,032	96,848	2,493,077	2574.2%	1.5335	1.00000	0.0273	0.9910	0.973	0.841	4.47%	0.2411				
2052	335,872	9,572,637	2850.1%	3,904	77,499	2,208,786	2850.1%	1.5335	1.00000	0.0318	0.9910	0.968	0.836	4.47%	0.2307				
2053	279,226	8,809,432	3155.0%	3,764	61,669	1,945,623	3155.0%	1.5335	1.00000	0.0359	0.9910	0.964	0.831	4.47%	0.2209				
2054	230,803	8,049,980	3487.8%	3,616	48,791	1,701,744	3487.8%	1.5335	1.00000	0.0393	0.9910	0.961	0.827	4.47%	0.2114				
2055	189,736	7,305,719	3850.5%	3,470	38,392	1,478,261	3850.5%	1.5335	1.00000	0.0402	0.9910	0.960	0.822	4.47%	0.2023				
2056	155,108	6,584,765	4245.3%	3,293	30,041	1,275,314	4245.3%	1.5335	1.00000	0.0511	0.9910	0.949	0.817	4.47%	0.1937				
2057	126,076	5,895,524	4676.2%	3,072	23,372	1,092,919	4676.2%	1.5335	1.00000	0.0672	0.9910	0.933	0.813	4.47%	0.1854				
2058	101,859	5,248,760	5153.0%	2,818	18,074	931,346	5153.0%	1.5335	1.00000	0.0825	0.9910	0.918	0.808	4.47%	0.1774				
2059	81,770	4,636,186	5669.8%	2,588	13,888	787,415	5669.8%	1.5335	1.00000	0.1081	0.9910	0.918	0.803	4.47%	0.1698				
2060	65,263	4,067,206	6232.0%	2,376	10,610	661,192	6232.0%	1.5335	1.00000	0.1387	0.9910	0.918	0.798	4.47%	0.1626				
2061																			

**Exhibit II-B**  
**Demonstration that Lifetime Incurred Claims with Requested Increase are**  
**Not Less than Lifetime Earned Premium with Prescribed Factors**

1	Accumulated value of initial earned premium	156,603,008	x	58%	=	90,829,744
2a	Accumulated value of earned premium	174,429,924				
2b	Accumulated value of prior premium rate schedule increases (2a-1)	17,826,917	x	85%	=	15,152,879
3	Present value of future projected initial earned premium	57,462,769	x	58%	=	33,328,406
4a	Present value of future projected premium	86,549,161				
4b	Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	29,086,392	x	85%	=	24,723,433
<b>5</b>	<b>Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b</b>					<b>164,034,463</b>
6a	Accumulated value of incurred claims without the inclusion of active life reserves					51,868,609
6b	Present value of future projected incurred claims without the inclusion of active life reserves					196,212,263
<b>7</b>	<b>Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b</b>					<b>248,080,872</b>
8	Test: 7 is not less than 5					TRUE

**Attachment 1**  
**Metropolitan Life Insurance Company**  
**Group Business Assumption Summary**

	Original Pricing Assumptions	Current Best Estimate Assumptions																																																																																																																														
Interest Rate:	6.00%	Maximum valuation interest rate for contract reserves, which average to 4.47%																																																																																																																														
Mortality:	1983 Group Annuity Mortality Table, adjusted to remove loading. These rates vary by age and sex.	97% of Annuity 2000 Basic table With Mortality Selection Factors of: <table><tr><td>Duration</td><td>Mortality Selection</td><td>Duration</td><td>Mortality Selection</td></tr><tr><td>1</td><td>55%</td><td>12</td><td>80%</td></tr><tr><td>2</td><td>65%</td><td>13</td><td>82%</td></tr><tr><td>3</td><td>70%</td><td>14</td><td>82%</td></tr><tr><td>4</td><td>71%</td><td>15</td><td>82%</td></tr><tr><td>5</td><td>76%</td><td>16</td><td>84%</td></tr><tr><td>6</td><td>77%</td><td>17</td><td>90%</td></tr><tr><td>7</td><td>78%</td><td>18</td><td>90%</td></tr><tr><td>8</td><td>78%</td><td>19</td><td>94%</td></tr><tr><td>9</td><td>80%</td><td>20+</td><td>100%</td></tr><tr><td>10</td><td>80%</td><td></td><td></td></tr><tr><td>11</td><td>80%</td><td></td><td></td></tr></table>	Duration	Mortality Selection	Duration	Mortality Selection	1	55%	12	80%	2	65%	13	82%	3	70%	14	82%	4	71%	15	82%	5	76%	16	84%	6	77%	17	90%	7	78%	18	90%	8	78%	19	94%	9	80%	20+	100%	10	80%			11	80%																																																																																
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Voluntary Lapse Rates:	<table><tr><td>Duration</td><td>Rates</td></tr><tr><td>1</td><td>5.50%</td></tr><tr><td>2</td><td>5.30%</td></tr><tr><td>3</td><td>5.10%</td></tr><tr><td>4</td><td>4.90%</td></tr><tr><td>5</td><td>4.80%</td></tr><tr><td>6</td><td>4.70%</td></tr><tr><td>7</td><td>4.65%</td></tr><tr><td>8</td><td>4.60%</td></tr><tr><td>9</td><td>4.55%</td></tr><tr><td>10+</td><td>4.50%</td></tr></table>	Duration	Rates	1	5.50%	2	5.30%	3	5.10%	4	4.90%	5	4.80%	6	4.70%	7	4.65%	8	4.60%	9	4.55%	10+	4.50%	<table><tr><td rowspan="2">Duration</td><td colspan="6">Issue Age</td></tr><tr><td>Under 40</td><td>40 to 44</td><td>45 to 49</td><td>50 to 54</td><td>55 to 59</td><td>over 59</td></tr><tr><td>1</td><td>15.60%</td><td>10.20%</td><td>7.60%</td><td>6.50%</td><td>6.10%</td><td>3.30%</td></tr><tr><td>2</td><td>12.30%</td><td>7.60%</td><td>5.80%</td><td>4.70%</td><td>3.90%</td><td>2.90%</td></tr><tr><td>3</td><td>10.00%</td><td>7.30%</td><td>5.40%</td><td>4.90%</td><td>3.70%</td><td>2.20%</td></tr><tr><td>4</td><td>7.90%</td><td>5.70%</td><td>4.10%</td><td>3.50%</td><td>2.90%</td><td>2.00%</td></tr><tr><td>5</td><td>7.10%</td><td>5.10%</td><td>3.80%</td><td>3.30%</td><td>2.60%</td><td>1.50%</td></tr><tr><td>6</td><td>5.00%</td><td>3.40%</td><td>3.10%</td><td>2.30%</td><td>2.10%</td><td>1.40%</td></tr><tr><td>7</td><td>5.00%</td><td>3.40%</td><td>3.10%</td><td>2.30%</td><td>2.10%</td><td>1.40%</td></tr><tr><td>8</td><td>4.00%</td><td>2.60%</td><td>2.40%</td><td>2.10%</td><td>1.30%</td><td>1.30%</td></tr><tr><td>9</td><td>4.00%</td><td>2.60%</td><td>2.40%</td><td>2.10%</td><td>1.30%</td><td>1.30%</td></tr><tr><td>10</td><td>4.00%</td><td>2.60%</td><td>2.40%</td><td>2.10%</td><td>1.30%</td><td>1.30%</td></tr><tr><td>11</td><td>4.40%</td><td>2.60%</td><td>2.00%</td><td>0.90%</td><td>1.00%</td><td>1.00%</td></tr><tr><td>12</td><td>4.40%</td><td>2.60%</td><td>2.00%</td><td>0.90%</td><td>1.00%</td><td>1.00%</td></tr><tr><td>*13+</td><td>1.80%</td><td>1.30%</td><td>1.00%</td><td>0.80%</td><td>0.70%</td><td>0.70%</td></tr></table> * After duration 13, grades down to 0.70% by attained age 65 where applicable	Duration	Issue Age						Under 40	40 to 44	45 to 49	50 to 54	55 to 59	over 59	1	15.60%	10.20%	7.60%	6.50%	6.10%	3.30%	2	12.30%	7.60%	5.80%	4.70%	3.90%	2.90%	3	10.00%	7.30%	5.40%	4.90%	3.70%	2.20%	4	7.90%	5.70%	4.10%	3.50%	2.90%	2.00%	5	7.10%	5.10%	3.80%	3.30%	2.60%	1.50%	6	5.00%	3.40%	3.10%	2.30%	2.10%	1.40%	7	5.00%	3.40%	3.10%	2.30%	2.10%	1.40%	8	4.00%	2.60%	2.40%	2.10%	1.30%	1.30%	9	4.00%	2.60%	2.40%	2.10%	1.30%	1.30%	10	4.00%	2.60%	2.40%	2.10%	1.30%	1.30%	11	4.40%	2.60%	2.00%	0.90%	1.00%	1.00%	12	4.40%	2.60%	2.00%	0.90%	1.00%	1.00%	*13+	1.80%	1.30%	1.00%	0.80%	0.70%	0.70%
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Morbidity:	Details of morbidity assumptions used in original pricing is not available.  Incidence and continuance rates for nursing home based on the 1985 NNHS with modifications.	Current Group block experience with morbidity U/W Selection Factors of: <table><tr><td>Duration</td><td>U/W Selection</td></tr><tr><td>1</td><td>58%</td></tr><tr><td>2</td><td>59%</td></tr><tr><td>3</td><td>83%</td></tr><tr><td>4+</td><td>100%</td></tr></table>	Duration	U/W Selection	1	58%	2	59%	3	83%	4+	100%																																																																																																																				
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Incidence:	Incidence and continuance rates for nursing home based on the 1985 NNHS with modifications.	Sample Ultimate Smoothed Incidence Rates (before gross-up to zero-day elimination) <table><tr><td rowspan="2">Attained Age</td><td colspan="2">Male</td><td colspan="2">Female</td></tr><tr><td>Facility Care</td><td>Home Care</td><td>Facility Care</td><td>Home Care</td></tr><tr><td>81</td><td>1.64%</td><td>1.18%</td><td>2.04%</td><td>1.18%</td></tr><tr><td>82</td><td>1.95%</td><td>1.35%</td><td>2.41%</td><td>1.36%</td></tr><tr><td>83</td><td>2.29%</td><td>1.53%</td><td>2.81%</td><td>1.55%</td></tr><tr><td>84</td><td>2.66%</td><td>1.71%</td><td>3.24%</td><td>1.76%</td></tr><tr><td>85</td><td>3.06%</td><td>1.91%</td><td>3.69%</td><td>1.97%</td></tr></table> Change Minor refinements to the Home Care incidence assumptions.	Attained Age	Male		Female		Facility Care	Home Care	Facility Care	Home Care	81	1.64%	1.18%	2.04%	1.18%	82	1.95%	1.35%	2.41%	1.36%	83	2.29%	1.53%	2.81%	1.55%	84	2.66%	1.71%	3.24%	1.76%	85	3.06%	1.91%	3.69%	1.97%																																																																																												
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Continuance:	Incidence and continuance rates for nursing home based on the 1985 NNHS with modifications.	Continuance curves were constructed in 2016 by gender and care path separately for deaths and recoveries. Coefficients to an exponential shaped curve were based on experience adjusted to minimize differences between actual and expected terminations in total as well as at periodic duration points along the curves.  Death and recovery termination rates are recombined into a single termination table for modeling and valuation uses.  In 2019, there were some minor refinements to the coefficients of the curves																																																																																																																														
Utilization:	Home care prevalence rates were based on 1982-1984 National Long Term Care Surveys with modifications.	<table><tr><td>Home Care</td><td>Facility Care</td></tr><tr><td>60%</td><td>71%</td></tr></table>	Home Care	Facility Care	60%	71%																																																																																																																										
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**Attachment 2**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**  
**Actual to Expected Ratios**

	Calendar Year	Actual / Projected Experience			Expected Pricing Experience			G = C / F Actual to Expected Ratio	Accumulative Loss Ratio as of 12/31/2018		
		A Earned Premium	B Incurred Claims	C = B / A Loss Ratio	D Earned Premium	E Incurred Claims	F = E / D Loss Ratio		H Actual/Projected at 4.47% (on C)	I Expected at 6% (on F)	J = H / I Actual to Expected Ratio
Historical Experience	1989	73,088	0	0.0%	73,088	4,029	5.5%	0.00	0.0%	5.5%	0.00
	1990	3,257,050	98,323	3.0%	5,311,180	329,177	6.2%	0.49	2.9%	6.2%	0.48
	1991	8,385,510	142,014	1.7%	10,112,966	918,674	9.1%	0.19	2.1%	8.0%	0.26
	1992	13,462,425	1,315,222	9.8%	13,627,176	1,676,420	12.3%	0.79	6.1%	9.9%	0.61
	1993	24,542,532	1,901,925	7.7%	25,811,872	3,080,002	11.9%	0.65	6.9%	10.8%	0.63
	1994	29,207,461	2,508,403	8.6%	26,445,658	4,619,335	17.5%	0.49	7.5%	12.8%	0.58
	1995	32,821,623	3,484,114	10.6%	29,571,488	6,322,772	21.4%	0.50	8.3%	14.9%	0.56
	1996	36,225,167	6,221,356	17.2%	32,843,385	8,233,368	25.1%	0.69	10.3%	16.9%	0.61
	1997	41,731,413	3,361,627	8.1%	33,261,076	10,127,920	30.4%	0.26	9.9%	19.1%	0.52
	1998	43,940,449	7,714,265	17.6%	34,779,640	12,278,468	35.3%	0.50	11.2%	21.3%	0.52
	1999	48,097,051	19,963,200	41.5%	41,736,097	14,437,295	34.6%	1.20	15.7%	23.1%	0.68
	2000	55,598,283	16,502,514	29.7%	50,139,603	17,016,701	33.9%	0.87	17.6%	24.6%	0.72
	2001	66,614,492	24,068,185	36.1%	59,764,759	20,224,778	33.8%	1.07	20.2%	25.8%	0.79
	2002	76,962,588	25,845,554	33.6%	68,464,473	23,682,297	34.6%	0.97	22.0%	26.8%	0.82
	2003	84,734,429	28,607,127	33.8%	71,644,385	27,261,769	38.1%	0.89	23.5%	28.1%	0.84
	2004	93,549,570	29,417,990	31.4%	80,593,438	31,638,773	39.3%	0.80	24.4%	29.2%	0.83
	2005	106,389,491	35,602,802	33.5%	90,340,254	36,495,479	40.4%	0.83	25.4%	30.3%	0.84
	2006	121,561,825	36,875,172	30.3%	97,421,952	41,629,933	42.7%	0.71	25.9%	31.4%	0.82
	2007	132,858,561	46,491,291	35.0%	99,561,785	46,874,251	47.1%	0.74	26.9%	32.7%	0.82
	2008	138,403,077	54,716,840	39.5%	97,738,095	51,557,726	52.8%	0.75	28.0%	34.1%	0.82
Projected Experience	2009	141,341,445	50,240,716	35.5%	94,966,334	56,121,390	59.1%	0.60	28.7%	35.6%	0.81
	2010	141,989,562	48,415,921	34.1%	89,718,036	60,515,268	67.5%	0.51	29.1%	37.2%	0.78
	2011	142,889,041	54,545,282	38.2%	84,687,280	64,203,430	75.8%	0.50	29.7%	38.9%	0.76
	2012	142,013,255	62,091,189	43.7%	78,799,915	67,286,746	85.4%	0.51	30.5%	40.6%	0.75
	2013	162,863,192	63,646,086	39.1%	72,902,140	69,986,365	96.0%	0.41	31.0%	42.3%	0.73
	2014	189,092,342	70,214,415	37.1%	67,021,906	72,070,083	107.5%	0.35	31.4%	44.0%	0.71
	2015	187,270,622	85,340,894	45.6%	61,486,908	73,734,116	119.9%	0.38	32.2%	45.6%	0.71
	2016	187,556,911	95,493,013	50.9%	56,284,154	74,959,172	133.2%	0.38	33.2%	47.3%	0.70
	2017	186,345,406	124,213,565	66.7%	51,403,340	75,737,804	147.3%	0.45	34.8%	48.9%	0.71
	2018	180,833,741	140,540,754	77.7%	46,831,534	76,222,538	162.8%	0.48	36.5%	50.4%	0.73
	2019	179,854,405	134,979,417	75.0%	42,566,892	76,568,884	179.9%	0.42	38.0%	51.9%	0.73
	2020	172,545,082	144,912,977	84.0%	38,597,616	76,481,363	198.2%	0.42	39.6%	53.3%	0.74
	2021	165,276,344	155,042,377	93.8%	34,917,259	76,113,387	218.0%	0.43	41.2%	54.6%	0.75
	2022	158,038,299	165,545,413	104.8%	31,514,459	75,633,225	240.0%	0.44	42.9%	55.9%	0.77
	2023	150,802,397	176,551,435	117.1%	28,376,448	74,799,329	263.6%	0.44	44.7%	57.1%	0.78
	2024	143,533,323	188,099,230	131.0%	25,497,232	73,764,894	289.3%	0.45	46.5%	58.3%	0.80
	2025	136,230,454	200,133,440	146.9%	22,860,210	72,677,748	317.9%	0.46	48.4%	59.3%	0.82
	2026	128,953,454	212,548,270	164.8%	20,451,240	71,363,566	348.9%	0.47	50.4%	60.3%	0.84
	2027	121,657,781	225,146,784	185.1%	18,263,677	69,998,949	383.3%	0.48	52.5%	61.3%	0.86
	2028	114,394,123	237,971,315	208.0%	16,275,994	68,686,931	422.0%	0.49	54.5%	62.2%	0.88
	2029	107,265,394	250,810,517	233.8%	14,480,974	67,257,280	464.5%	0.50	56.7%	63.0%	0.90
	2030	100,216,491	263,449,743	262.9%	12,860,337	65,791,146	511.6%	0.51	58.8%	63.8%	0.92
	2031	93,279,467	275,730,380	295.6%	11,398,924	64,372,349	564.7%	0.52	61.0%	64.5%	0.95
	2032	86,502,095	287,376,392	332.2%	10,086,638	62,866,128	623.3%	0.53	63.2%	65.2%	0.97
	2033	79,874,951	298,176,293	373.3%	8,912,477	61,330,583	688.1%	0.54	65.5%	65.8%	1.00
	2034	73,419,231	307,844,461	419.3%	7,860,976	59,816,976	760.9%	0.55	67.7%	66.4%	1.02
	2035	67,195,282	315,998,872	470.3%	6,922,734	58,196,726	840.7%	0.56	69.9%	66.9%	1.04
	2036	61,196,639	322,439,051	526.9%	6,083,148	56,549,556	929.6%	0.57	72.0%	67.4%	1.07
	2037	55,446,846	327,292,319	590.3%	5,332,277	54,940,188	1030.3%	0.57	74.1%	67.8%	1.09
	2038	50,017,876	330,293,108	660.4%	4,667,427	53,277,041	1141.5%	0.58	76.2%	68.3%	1.12
	2039	44,896,939	331,044,062	737.3%	4,075,550	51,578,188	1265.6%	0.58	78.2%	68.6%	1.14
	2040	40,100,900	329,556,826	821.8%	3,549,036	49,775,407	1402.5%	0.59	80.1%	69.0%	1.16
	2041	35,638,286	326,050,406	914.9%	3,084,069	47,831,245	1550.9%	0.59	81.9%	69.3%	1.18
	2042	31,510,732	320,644,871	1017.6%	2,670,023	45,833,972	1716.6%	0.59	83.7%	69.6%	1.20
	2043	27,717,481	313,388,572	1130.7%	2,305,719	43,613,334	1891.5%	0.60	85.3%	69.9%	1.22
	2044	24,254,172	304,437,745	1255.2%	1,986,011	41,420,050	2085.6%	0.60	86.8%	70.1%	1.24
	2045	21,112,367	293,941,395	1392.3%	1,705,128	39,208,006	2299.4%	0.61	88.2%	70.3%	1.25
	2046	18,280,565	282,098,762	1543.2%	1,458,304	36,985,383	2536.2%	0.61	89.5%	70.5%	1.27
	2047	15,743,943	269,053,633	1708.9%	1,243,293	34,815,193	2800.2%	0.61	90.7%	70.7%	1.28
	2048	13,485,726	255,126,266	1891.8%	1,055,463	32,676,900	3096.0%	0.61	91.8%	70.8%	1.30
	2049	11,488,614	240,446,363	2092.9%	893,288	30,443,218	3408.0%	0.61	92.8%	70.9%	1.31
	2050	9,734,896	225,260,499	2313.9%	754,026	28,108,556	3727.8%	0.62	93.6%	71.1%	1.32
	2051	8,204,526	209,824,719	2557.4%	632,787	25,682,760	4058.7%	0.63	94.4%	71.2%	1.33
	2052	6,877,171	194,286,488	2825.1%	529,093	23,227,989	4390.2%	0.64	95.1%	71.2%	1.34
	2053	5,732,558	178,809,370	3119.2%	440,783	20,881,279	4737.3%	0.66	95.8%	71.3%	1.34
	2054	4,752,635	163,626,550	3442.9%	366,143	18,505,384	5054.1%	0.68	96.3%	71.4%	1.35
	2055	3,919,684	148,845,570	3797.4%	303,067	16,111,346	5316.1%	0.71	96.8%	71.4%	1.36
	2056	3,215,464	134,596,659	4185.9%	249,979	13,781,442	5513.0%	0.76	97.2%	71.5%	1.36
	2057	2,623,337	121,019,745	4613.2%	206,006	11,629,508	5645.2%	0.82	97.5%	71.5%	1.36
	2058	2,128,280	108,244,637	5086.0%	169,243	9,724,792	5746.0%	0.89	97.9%	71.5%	1.37
	2059	1,717,112	96,256,777	5605.7%	139,041	8,056,167	5794.1%	0.97	98.1%	71.5%	1.37
	2060	1,377,916	85,101,342	6176.1%	114,085	6,644,538	5824.2%	1.06	98.3%	71.5%	1.37
Past		2,820,611,603	1,139,579,759	40.4%	1,673,343,917	1,049,246,078	62.7%	0.64	36.5%	50.4%	0.73
Future		2,580,213,236	9,752,003,051	378.0%	395,857,078	1,977,020,907	499.4%	0.76	255.5%	354.3%	0.72
Lifetime		5,400,824,840	10,891,582,810	201.7%	2,069,200,995	3,026,266,985	146.3%	1.38	98.3%	72.0%	1.37

Note:

- Figures in column A are normalized to reflect the prior rate action authorized by Pennsylvania rather than the prior rate action approved by other states.
- Figures in column D do not reflect any rate action.

**Attachment 3**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**  
**Actual to Expected Ratios**

Duration	Actual / Projected Experience			Expected Pricing Experience			G = C / F
	Actual Experience through 12/31/2018			Reproduced based on Original Pricing			
	Projections based on Current Assumptions			Assumptions since inception			
	A	B	C = B / A	D	E	F = E / D	
	Earned Premium	Incurred Claims	Loss Ratio	Earned Premium	Incurred Claims	Loss Ratio	Actual to Expected Ratio
1	109,211,753	17,639,534	16.2%	103,097,706	5,683,649	5.5%	2.93
2	181,678,373	14,382,125	7.9%	171,360,628	20,953,104	12.2%	0.65
3	170,882,694	15,882,104	9.3%	158,818,285	28,457,066	17.9%	0.52
4	163,705,671	23,305,970	14.2%	147,274,304	35,627,975	24.2%	0.59
5	160,290,888	26,156,859	16.3%	136,457,042	43,500,661	31.9%	0.51
6	157,360,455	23,593,986	15.0%	126,336,500	55,541,985	44.0%	0.34
7	156,477,923	36,645,895	23.4%	116,680,376	60,824,280	52.1%	0.45
8	156,867,413	42,113,822	26.8%	107,509,122	63,561,205	59.1%	0.45
9	157,794,086	45,202,572	28.6%	99,008,523	67,919,789	68.6%	0.42
10	159,567,433	53,264,503	33.4%	90,970,313	70,420,795	77.4%	0.43
11	161,695,775	56,698,806	35.1%	83,439,578	71,649,125	85.9%	0.41
12	161,997,432	63,046,407	38.9%	76,299,034	75,342,317	98.7%	0.39
13	165,248,246	66,026,003	40.0%	69,560,477	77,221,731	111.0%	0.36
14	169,290,967	76,932,429	45.4%	63,251,299	78,053,325	123.4%	0.37
15	168,977,528	89,744,611	53.1%	57,325,991	80,677,569	140.7%	0.38
16	169,379,855	95,717,826	56.5%	51,839,802	81,105,167	156.5%	0.36
17	169,746,557	103,406,948	60.9%	46,766,568	80,994,286	173.2%	0.35
18	167,350,685	119,461,483	71.4%	42,035,652	82,285,425	195.8%	0.36
19	163,786,016	128,747,533	78.6%	37,732,817	81,805,767	216.8%	0.36
20	160,239,239	141,913,336	88.6%	33,753,616	80,282,014	237.8%	0.37
21	156,003,646	148,269,439	95.0%	30,148,995	79,683,011	264.3%	0.36
22	149,962,425	166,345,133	110.9%	26,853,682	77,836,956	289.9%	0.38
23	144,601,897	186,091,257	128.7%	23,859,317	75,429,536	316.1%	0.41
24	139,789,000	202,977,087	145.2%	21,174,388	74,653,590	352.6%	0.41
25	133,764,106	222,286,112	166.2%	18,765,584	72,901,932	388.5%	0.43
26	127,547,612	238,860,835	187.3%	16,577,171	70,617,790	426.0%	0.44
27	122,195,123	255,762,253	209.3%	14,633,500	70,080,798	478.9%	0.44
28	115,121,544	273,253,441	237.4%	12,876,654	68,650,989	533.1%	0.45
29	107,961,511	284,373,998	263.4%	11,360,426	66,964,157	589.5%	0.45
30	101,081,248	299,296,023	296.1%	10,003,331	66,209,907	661.9%	0.45
31	93,548,473	312,182,920	333.7%	8,770,661	64,163,546	731.6%	0.46
32	86,200,346	323,342,482	375.1%	7,682,739	62,012,506	807.2%	0.46
33	79,087,269	332,769,559	420.8%	6,710,210	60,871,075	907.1%	0.46
34	72,245,318	340,232,788	470.9%	5,843,295	59,040,309	1010.4%	0.47
35	65,682,964	345,565,285	526.1%	5,132,022	57,121,977	1113.1%	0.47
36	59,447,254	348,801,899	586.7%	4,439,674	55,785,198	1256.5%	0.47
37	53,544,305	349,763,990	653.2%	3,851,267	54,210,767	1407.6%	0.46
38	48,009,336	348,442,547	725.8%	3,315,743	52,540,110	1584.6%	0.46
39	42,850,047	344,826,229	804.7%	2,856,766	51,489,229	1802.4%	0.45
40	38,062,491	339,094,029	890.9%	2,457,829	49,851,407	2028.3%	0.44
41	33,662,794	331,524,081	984.8%	2,104,301	47,702,035	2266.9%	0.43
42	29,631,844	322,270,826	1087.6%	1,784,894	46,115,027	2583.6%	0.42
43	25,960,341	311,424,215	1199.6%	1,518,520	44,122,427	2905.6%	0.41
44	22,635,140	299,254,981	1322.1%	1,281,959	42,035,137	3279.0%	0.40
45	19,643,598	286,111,008	1456.5%	1,077,682	40,263,559	3736.1%	0.39
46	16,975,688	272,074,400	1602.7%	915,457	38,122,461	4164.3%	0.38
47	14,603,361	257,432,040	1762.8%	765,311	36,058,859	4711.7%	0.37
48	12,504,126	242,395,142	1938.5%	613,955	34,206,922	5571.6%	0.35
49	10,657,679	227,100,357	2130.9%	522,180	32,218,925	6170.1%	0.35
50	9,040,639	211,707,433	2341.7%	425,690	30,126,161	7077.0%	0.33
51	7,631,139	196,361,436	2573.2%	347,029	24,559,341	7077.0%	0.36
52	6,408,978	181,098,364	2825.7%	282,904	20,021,177	7077.0%	0.40
53	5,354,605	166,083,684	3101.7%	230,628	16,321,592	7077.0%	0.44
54	4,449,415	151,416,829	3403.1%	188,012	13,305,630	7077.0%	0.48
55	3,676,384	137,244,981	3733.2%	153,270	10,846,968	7077.0%	0.53
56	3,019,621	123,697,388	4096.5%	124,948	8,842,626	7077.0%	0.58
57	2,464,568	110,820,245	4496.5%	101,860	7,208,654	7077.0%	0.64
58	1,998,273	98,618,739	4935.2%	83,038	5,876,613	7077.0%	0.70
59	1,608,944	87,149,882	5416.6%	67,694	4,790,711	7077.0%	0.77
60	1,285,921	76,477,457	5947.3%	55,185	3,905,466	7077.0%	0.84
Lifetime	5,401,467,961	10,992,683,544	203.5%	2,069,475,403	3,038,672,312	146.8%	1.39
Lifetime*	2,698,909,305	2,647,391,991	98.1%	1,240,235,183	905,044,099	73.0%	1.34

Note:

- Figures in column A are normalized to reflect the prior rate action authorized by Pennsylvania rather than the prior rate action approved by other states.

- Figures in column D do not reflect any rate action.

\* Columns A and B are discounted back to the inception date at an interest rate of 4.47%, which is the weighted average maximum valuation interest rate for contract reserves. Columns D and E are discounted back to the inception date at the original pricing interest rate of 6%.

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual-to-Expected Results - Lapse**  
**Group Business**

<b>Lapse</b>			
<b>Policy Duration</b>	<b>Actual</b>	<b>Expected <sup>1,2</sup></b>	<b>A/E%</b>
1	23,387	31,077	75.3%
2	21,027	21,607	97.3%
3	16,139	17,791	90.7%
4	13,722	12,884	106.5%
5	11,258	10,788	104.4%
6	8,879	7,609	116.7%
7	7,345	7,207	101.9%
8	6,891	5,146	133.9%
9	5,229	4,768	109.7%
10	5,790	4,516	128.2%
11	4,505	3,336	135.0%
12	3,105	3,087	100.6%
13+	11,400	9,048	126.0%

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual-to-Expected Results - Mortality**  
**Group Business**

<b>Mortality</b>			
<b>Policy Duration</b>	<b>Actual</b>	<b>Expected <sup>1</sup></b>	<b>A/E%</b>
1	791	764	103.58%
2	966	934	103.44%
3	1,097	1,050	104.48%
4	1,160	1,110	104.49%
5	1,296	1,241	104.47%
6	1,318	1,315	100.21%
7	1,449	1,396	103.83%
8	1,391	1,329	104.63%
9	1,462	1,401	104.36%
10	1,442	1,450	99.45%
11	1,510	1,458	103.56%
12	1,493	1,447	103.18%
13	1,506	1,446	104.17%
14	1,433	1,381	103.77%
15	1,424	1,378	103.31%
16	1,454	1,391	104.52%
17	1,462	1,401	104.33%
18	1,327	1,276	103.99%
19	1,270	1,223	103.83%
20+	7,326	7,034	104.15%

<sup>1</sup> The expecteds are based on current best estimate assumptions.

<sup>2</sup> Experience based on most recent five years only. The majority of the remaining policies are in their 13<sup>th</sup> duration or later, as a result, the results for duration 12 and before are no longer relevant.

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual to Expected Incidence**  
**Group Business**

Attained Age	Female						Male					
	Facility Care			Home Care			Facility Care			Home Care		
	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%
under 50	18	64	28%	48	60	79%	24	50	48%	69	49	141%
50 to 54	27	70	39%	74	66	111%	24	56	43%	63	56	113%
55 to 59	48	113	42%	124	107	116%	43	93	46%	93	93	100%
60 to 64	115	153	75%	142	140	102%	113	134	85%	142	132	108%
65 to 69	237	201	118%	210	153	137%	203	171	118%	171	156	110%
70 to 74	495	466	106%	270	239	113%	375	356	105%	289	244	118%
75 to 79	984	960	103%	379	367	103%	682	686	99%	347	334	104%
80 to 84	1,441	1,420	101%	439	441	99%	933	956	98%	330	347	95%
85 to 89	1,210	1,198	101%	308	342	90%	758	759	100%	222	232	95%
over 89	520	523	100%	140	148	94%	326	305	107%	93	105	89%
<b>Total</b>	<b>5,095</b>	<b>5,168</b>	<b>99%</b>	<b>2,134</b>	<b>2,065</b>	<b>103%</b>	<b>3,481</b>	<b>3,565</b>	<b>98%</b>	<b>1,819</b>	<b>1,748</b>	<b>104%</b>

<sup>1</sup> Based on actual experience through 6/30/2018.

<sup>2</sup> The expected claims are based on current best estimate assumptions.

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual to Expected Claim Termination**  
**All Business (exclude AARP-Pru)**

<b>Claim Duration (Months)</b>	<b>Actual Deaths</b>	<b>Expected Deaths<sup>1</sup></b>	<b>Actual Recoveries</b>	<b>Expected Recoveries<sup>1</sup></b>	<b>Deaths A/E%</b>	<b>Recoveries A/E%</b>	<b>Total A/E%</b>
1	970	678	69	107	143%	64%	132%
2	850	1,334	180	257	64%	70%	65%
3	891	1,224	251	254	73%	99%	77%
4	1,019	1,394	336	294	73%	114%	80%
5	1,036	1,191	312	246	87%	127%	94%
6	885	1,001	228	201	88%	113%	93%
7	799	844	203	168	95%	121%	99%
8	722	734	151	139	98%	108%	100%
9	668	649	126	117	103%	108%	104%
10	618	588	124	100	105%	124%	108%
11	553	544	98	87	102%	112%	103%
12	616	512	94	77	120%	122%	121%
13	500	483	89	69	103%	129%	107%
14+	15,204	13,659	1,350	1,476	111%	91%	109%
<b>Total</b>	<b>25,331</b>	<b>24,835</b>	<b>3,611</b>	<b>3,594</b>	<b>102%</b>	<b>100%</b>	<b>102%</b>

<sup>1</sup> The expected deaths and recoveries are based on current best estimate assumptions.

**Attachment 9-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**

	Calendar Year	Loss Ratio Demonstration								Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors	
		Without Interest				With Interest				Premium		Persistency Factors				Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Paid Claims	Loss Ratio	Life Years	Earned Premium	Paid Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency			
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%							4.47%	3.6378	
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%							4.47%	3.4819	
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%							4.47%	3.3328	
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%							4.47%	3.1901	
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%							4.47%	3.0534	
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%							4.47%	2.9226	
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%							4.47%	2.7975	
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%							4.47%	2.6777	
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%							4.47%	2.5630	
	1998	43,940,449	7,400,663	16.8%	82,595	107,794,308	18,155,238	16.8%							4.47%	2.4532	
	1999	49,097,051	19,903,012	41.4%	95,693	112,937,587	46,734,635	41.4%							4.47%	2.3481	
	2000	55,598,283	15,341,470	27.6%	111,642	124,959,751	34,480,673	27.6%							4.47%	2.2475	
	2001	66,614,492	23,296,986	35.0%	138,474	143,306,604	50,118,403	35.0%							4.47%	2.1513	
	2002	76,962,588	25,824,880	33.6%	154,041	158,476,862	53,177,083	33.6%							4.47%	2.0591	
	2003	84,734,429	27,262,857	32.2%	161,514	167,007,058	53,733,643	32.2%							4.47%	1.9709	
	2004	93,549,570	29,011,708	31.0%	177,688	176,484,037	54,731,448	31.0%							4.47%	1.8865	
	2005	106,389,491	33,953,523	31.9%	193,671	192,110,489	61,310,830	31.9%							4.47%	1.8057	
	2006	121,561,825	35,342,958	29.1%	207,903	210,105,912	61,086,319	29.1%							4.47%	1.7284	
	2007	132,858,561	45,028,895	33.9%	211,594	219,795,765	74,493,961	33.9%							4.47%	1.6544	
	2008	138,403,077	51,819,969	37.4%	211,070	219,161,487	82,057,002	37.4%							4.47%	1.5835	
	2009	141,341,445	48,299,312	34.2%	199,029	214,228,247	73,206,249	34.2%							4.47%	1.5157	
	2010	141,989,582	46,028,904	32.4%	193,053	205,992,943	66,776,946	32.4%							4.47%	1.4508	
	2011	142,889,041	50,689,248	35.5%	187,553	198,419,139	70,388,302	35.5%							4.47%	1.3886	
	2012	142,013,255	54,145,282	38.1%	178,477	188,756,638	71,967,095	38.1%							4.47%	1.3291	
	2013	162,863,192	53,843,020	33.1%	170,629	207,197,738	68,500,143	33.1%							4.47%	1.2722	
	2014	189,092,342	51,316,061	27.1%	165,636	230,263,300	62,489,075	27.1%							4.47%	1.2177	
	2015	187,270,622	56,233,400	30.0%	160,865	218,277,590	65,544,136	30.0%							4.47%	1.1656	
	2016	187,556,911	41,767,092	22.3%	156,155	209,247,985	46,597,482	22.3%							4.47%	1.1157	
	2017	186,345,406	29,221,373	15.7%	151,817	198,992,000	31,204,523	15.7%							4.47%	1.0679	
	2018	180,833,741	9,109,991	5.0%	147,355	184,835,382	9,311,585	5.0%							4.47%	1.0221	
Projected Future Experience	2019	179,854,405	24,293,532	13.5%	145,563	175,960,601	23,767,583	13.5%	1.4356	N/A	0.0122	N/A	0.988	0.995	4.47%	0.9784	
	2020	172,545,082	57,644,053	33.4%	143,936	161,579,276	53,980,584	33.4%	1.4356	N/A	0.0112	N/A	0.989	0.959	4.47%	0.9364	
	2021	165,276,344	96,938,230	52.6%	141,622	148,143,460	77,926,035	52.6%	1.4356	N/A	0.0161	N/A	0.984	0.958	4.47%	0.8963	
	2022	158,038,299	113,293,590	71.7%	140,234	135,588,498	97,199,905	71.7%	1.4356	N/A	0.0098	N/A	0.990	0.956	4.47%	0.8579	
	2023	150,802,397	137,185,204	91.0%	138,939	123,839,007	112,656,562	91.0%	1.4356	N/A	0.0092	N/A	0.991	0.954	4.47%	0.8212	
	2024	143,533,323	157,784,204	109.9%	137,694	112,821,189	124,022,779	109.9%	1.4356	N/A	0.0090	N/A	0.991	0.952	4.47%	0.7860	
	2025	136,230,454	176,926,266	129.9%	136,495	102,494,568	133,112,537	129.9%	1.4356	N/A	0.0087	N/A	0.991	0.949	4.47%	0.7524	
	2026	128,953,454	193,843,117	150.3%	135,320	92,864,204	139,593,677	150.3%	1.4356	N/A	0.0086	N/A	0.991	0.947	4.47%	0.7201	
	2027	121,657,781	220,944,963	181.7%	134,175	83,857,897	144,024,370	181.7%	1.4356	N/A	0.0085	N/A	0.992	0.943	4.47%	0.6893	
	2028	114,394,123	233,793,695	204.6%	133,053	75,473,850	147,652,444	204.6%	1.4356	N/A	0.0084	N/A	0.992	0.940	4.47%	0.6598	
	2029	107,265,394	238,765,975	222.6%	131,949	67,739,368	150,783,544	222.6%	1.4356	N/A	0.0083	N/A	0.992	0.938	4.47%	0.6315	
	2030	100,216,491	253,497,459	252.9%	130,844	60,577,230	153,230,011	252.9%	1.4356	N/A	0.0084	N/A	0.992	0.934	4.47%	0.6045	
	2031	93,279,467	267,944,279	287.2%	129,759	53,969,077	155,025,602	287.2%	1.4356	N/A	0.0083	N/A	0.992	0.931	4.47%	0.5786	
	2032	86,502,095	282,225,448	326.3%	128,634	47,904,276	156,294,546	326.3%	1.4356	N/A	0.0087	N/A	0.991	0.927	4.47%	0.5538	
	2033	79,874,951	296,180,678	370.8%	127,506	42,339,622	156,997,628	370.8%	1.4356	N/A	0.0088	N/A	0.991	0.923	4.47%	0.5301	
	2034	73,419,231	309,601,398	421.7%	126,339	37,250,741	157,082,569	421.7%	1.4356	N/A	0.0092	N/A	0.991	0.919	4.47%	0.5074	
	2035	67,195,282	322,211,759	479.5%	125,087	32,632,668	156,478,684	479.5%	1.4356	N/A	0.0099	N/A	0.990	0.915	4.47%	0.4856	
	2036	61,196,639	333,744,148	545.4%	123,802	28,446,582	155,137,280	545.4%	1.4356	N/A	0.0103	N/A	0.990	0.911	4.47%	0.4648	
	2037	55,446,846	343,951,281	620.3%	122,405	24,669,939	153,034,081	620.3%	1.4356	N/A	0.0113	N/A	0.989	0.906	4.47%	0.4449	
	2038	50,017,876	352,875,806	705.1%	120,940	21,301,255	150,195,047	705.1%	1.4356	N/A	0.0120	N/A	0.988	0.902	4.47%	0.4259	
	2039	44,896,939	359,656,863	801.1%	119,390	18,301,446	146,607,778	801.1%	1.4356	N/A	0.0128	N/A	0.987	0.898	4.47%	0.4076	
	2040	40,100,900	364,632,420	909.3%	117,631	15,646,294	142,269,778	909.3%	1.4356	N/A	0.0147	N/A	0.985	0.893	4.47%	0.3902	
	2041	35,638,286	367,458,774	1031.1%	115,814	13,309,536	137,231,784	1031.1%	1.4356	N/A	0.0155	N/A	0.985	0.889	4.47%	0.3735	
	2042	31,510,732	368,086,745	1168.1%	113,879	11,264,017	131,578,515	1168.1%	1.4356	N/A	0.0167	N/A	0.983	0.884	4.47%	0.3575	
	2043	27,717,481	366,508,073	1322.3%	111,825	9,483,688	125,402,751	1322.3%	1.4356	N/A	0.0180	N/A	0.982	0.880	4.47%	0.3422	
	2044	24,254,172	362,748,004	1495.6%	109,791	7,943,258	118,800,226	1495.6%	1.4356	N/A	0.0182	N/A	0.982	0.875	4.47%	0.3275	
	2045	21,112,367	356,878,451	1690.4%	107,616	6,618,169	111,871,967	1690.4%	1.4356	N/A	0.0198	N/A	0.980	0.870	4.47%	0.3135	
	2046	18,280,565	349,007,122	1909.2%	105,360	5,485,034	104,718,630	1909.2%	1.4356	N/A	0.0210	N/A	0.979	0.866	4.47%	0.3000	
	2047	15,743,943	339,277,027	2155.0%	103,045	4,521,597	97,439,003	2155.0%	1.4356	N/A	0.0220	N/A	0.978	0.861	4.47%	0.2872	
	2048	13,485,726	327,848,647	2431.1%	100,496	3,707,161	90,124,281	2431.1%	1.4356	N/A	0.0247	N/A	0.975	0.857	4.47%	0.2749	
2049	11,488,614	314,932,504	2741.3%	97,813	3,022,898	82,865,412	2741.3%	1.4356	N/A	0.0265	N/A	0.973	0.852	4.47%	0.2631		
2050	9,734,896	300,743,924	3089.3%	94,914	2,451,748	75,742,805	3089.3%	1.4356	N/A	0.0296	N/A	0.970	0.847	4.47%	0.2519		
2051	8,204,526	285,525,304	3480.1%	91,821	1,977,820	68,830,011	3480.1%	1.4356	N/A	0.0326	N/A	0.967	0.843	4.47%	0.2411		
2052	6,877,171	269,497,216	3918.7%	88,307	1,586,835	62,183,654	3918.7%	1.4356	N/A	0.0383	N/A	0.962	0.838	4.47%	0.2307		
2053	5,732,558	252,857,020	4410.9%	84,247	1,266,074	55,845,178	4410.9%	1.4356	N/A	0.0460	N/A	0.954	0.834	4.47%	0.2209		
2054	4,752,635	235,833,695	4963.2%	80,209	1,004,694	49,865,170	4963.2%	1.4356	N/A	0.0479	N/A	0.952	0.829	4.47%	0.2114		
2055	3,919,684	218,833,970	5582.9%	76,200	793,120	44,279,513	5582.9%	1.4356	N/A	0.0500	N/A	0.950	0.825	4.47%	0.2023		
2056	3,215,464	201,847,084	6277.4%	72,062	622,760	39,093,027	6277.4%	1.4356	N/A	0.0543	N/A	0.946	0.820	4.47%	0.1937		
2057	2,623,337	185,015,637	7052.7%	66,630	486,317	34,298,408	7052.7%	1.4356	N/A	0.0							

**Attachment 9-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 6.82% Future Increase**

	Calendar Year	Loss Ratio Demonstration						Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors		
		Without Interest			With Interest			Premium		Benefit		Persistence Factors		Premium Persistence	Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Paid Claims	Loss Ratio	Life Years	Earned Premium	Paid Claims	Loss Ratio	Rate Increase Factor	Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistence			
Historical Experience	1989	73,088	-	0.0%	269	265,877	-	0.0%							4.47%	3.6378
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%							4.47%	3.4819
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%							4.47%	3.3328
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%							4.47%	3.1901
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%							4.47%	3.0534
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%							4.47%	2.9226
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%							4.47%	2.7975
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%							4.47%	2.6777
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%							4.47%	2.5630
	1998	43,940,449	7,400,663	16.8%	82,595	107,794,308	18,155,238	16.8%							4.47%	2.4532
	1999	49,097,051	19,903,012	41.4%	95,693	112,937,587	46,734,635	41.4%							4.47%	2.3481
	2000	55,598,283	15,341,470	27.6%	111,642	124,959,751	34,480,673	27.6%							4.47%	2.2475
	2001	66,614,492	23,296,986	35.0%	138,474	143,306,604	50,118,403	35.0%							4.47%	2.1513
	2002	76,962,588	25,824,880	33.6%	154,041	158,476,862	53,177,083	33.6%							4.47%	2.0591
	2003	84,734,429	27,262,857	32.2%	161,514	167,007,058	53,733,643	32.2%							4.47%	1.9709
	2004	93,549,570	29,011,708	31.0%	177,688	176,484,037	54,734,448	31.0%							4.47%	1.8865
	2005	106,389,491	33,953,523	31.9%	193,671	192,110,489	61,310,830	31.9%							4.47%	1.8057
	2006	121,561,825	38,342,958	29.1%	207,903	210,105,912	61,086,319	29.1%							4.47%	1.7284
	2007	132,858,561	45,028,895	33.9%	211,594	219,795,765	74,493,961	33.9%							4.47%	1.6544
	2008	138,403,077	51,819,969	37.4%	211,070	219,161,487	82,057,002	37.4%							4.47%	1.5835
	2009	141,341,445	48,299,312	34.2%	199,029	214,228,247	73,206,249	34.2%							4.47%	1.5157
2010	141,989,582	46,028,904	32.4%	193,053	205,992,943	66,776,946	32.4%							4.47%	1.4508	
2011	142,889,041	50,689,248	35.5%	187,553	198,419,139	70,388,302	35.5%							4.47%	1.3886	
2012	142,013,255	54,145,282	38.1%	178,477	188,756,638	71,967,095	38.1%							4.47%	1.3291	
2013	162,863,192	53,843,020	33.1%	170,629	207,197,738	68,500,143	33.1%							4.47%	1.2722	
2014	189,092,342	51,316,061	27.1%	165,636	230,263,300	62,489,075	27.1%							4.47%	1.2177	
2015	187,270,622	56,233,400	30.0%	160,865	218,277,590	65,544,136	30.0%							4.47%	1.1656	
2016	187,556,911	41,767,092	22.3%	156,155	209,247,985	46,597,482	22.3%							4.47%	1.1157	
2017	186,345,406	29,221,373	15.7%	151,817	198,992,000	31,204,523	15.7%							4.47%	1.0679	
2018	180,833,741	9,109,991	5.0%	147,355	184,835,382	9,311,585	5.0%							4.47%	1.0221	
Projected Future Experience	2019	179,854,405	24,293,532	13.5%	145,563	175,960,601	23,767,583	13.5%	1.4356	1.00000	0.0122	1.0000	0.988	0.995	4.47%	0.9784
	2020	175,938,204	57,471,121	32.7%	143,504	164,756,754	53,818,643	32.7%	1.4683	1.00000	0.0141	0.9970	0.986	0.959	4.47%	0.9364
	2021	175,498,901	96,416,601	49.2%	140,772	157,297,363	77,458,479	49.2%	1.5335	1.00000	0.0190	0.9940	0.981	0.958	4.47%	0.8963
	2022	167,297,162	112,273,948	67.1%	138,972	143,532,113	96,325,106	67.1%	1.5335	1.00000	0.0128	0.9910	0.987	0.956	4.47%	0.8579
	2023	159,637,336	135,950,538	85.2%	137,689	131,094,264	111,642,653	85.2%	1.5335	1.00000	0.0092	0.9910	0.991	0.954	4.47%	0.8212
	2024	151,942,395	156,364,147	102.9%	136,455	119,430,954	122,906,574	102.9%	1.5335	1.00000	0.0090	0.9910	0.991	0.952	4.47%	0.7860
	2025	144,211,678	175,333,930	121.6%	135,266	108,499,336	131,914,524	121.6%	1.5335	1.00000	0.0087	0.9910	0.991	0.949	4.47%	0.7524
	2026	136,508,346	192,098,529	140.7%	134,103	98,394,765	138,337,334	140.7%	1.5335	1.00000	0.0086	0.9910	0.991	0.947	4.47%	0.7201
	2027	128,785,248	207,084,458	160.8%	132,967	88,770,813	142,728,151	160.8%	1.5335	1.00000	0.0085	0.9910	0.992	0.943	4.47%	0.6883
	2028	121,096,040	221,779,552	183.1%	131,855	79,895,576	146,323,572	183.1%	1.5335	1.00000	0.0084	0.9910	0.992	0.940	4.47%	0.6598
	2029	113,549,660	236,617,082	208.4%	130,762	71,707,960	149,426,492	208.4%	1.5335	1.00000	0.0083	0.9910	0.992	0.938	4.47%	0.6315
	2030	106,087,794	251,215,982	236.8%	129,666	64,126,220	151,850,941	236.8%	1.5335	1.00000	0.0084	0.9910	0.992	0.934	4.47%	0.6045
	2031	98,744,357	265,532,780	268.9%	128,591	57,130,921	153,830,372	268.9%	1.5335	1.00000	0.0083	0.9910	0.992	0.931	4.47%	0.5786
	2032	91,589,924	279,685,419	305.4%	127,476	50,710,805	154,887,895	305.4%	1.5335	1.00000	0.0087	0.9910	0.991	0.927	4.47%	0.5538
	2033	84,554,521	293,515,052	347.1%	126,359	44,820,139	155,584,649	347.1%	1.5335	1.00000	0.0088	0.9910	0.991	0.923	4.47%	0.5301
	2034	77,720,585	306,814,986	394.8%	125,202	39,433,120	155,668,826	394.8%	1.5335	1.00000	0.0092	0.9910	0.991	0.919	4.47%	0.5074
	2035	71,131,998	319,311,853	448.9%	123,961	34,544,492	155,070,375	448.9%	1.5335	1.00000	0.0099	0.9910	0.990	0.915	4.47%	0.4856
	2036	64,781,918	330,740,450	510.5%	122,687	30,113,159	153,741,044	510.5%	1.5335	1.00000	0.0103	0.9910	0.990	0.911	4.47%	0.4648
	2037	58,695,266	340,655,719	580.7%	121,303	26,115,257	151,656,774	580.7%	1.5335	1.00000	0.0113	0.9910	0.989	0.906	4.47%	0.4449
	2038	52,948,233	349,501,724	660.1%	119,852	22,549,214	148,843,292	660.1%	1.5335	1.00000	0.0120	0.9910	0.988	0.902	4.47%	0.4259
	2039	47,527,280	356,419,951	749.9%	118,316	19,373,658	145,288,308	749.9%	1.5335	1.00000	0.0128	0.9910	0.987	0.898	4.47%	0.4076
2040	42,450,259	361,350,728	851.2%	116,573	16,562,951	140,989,350	851.2%	1.5335	1.00000	0.0147	0.9910	0.985	0.893	4.47%	0.3902	
2041	37,726,198	364,151,645	965.2%	114,771	14,089,291	135,996,698	965.2%	1.5335	1.00000	0.0155	0.9910	0.985	0.889	4.47%	0.3735	
2042	33,356,826	364,773,964	1093.6%	112,854	11,923,933	130,394,309	1093.6%	1.5335	1.00000	0.0167	0.9910	0.983	0.884	4.47%	0.3575	
2043	29,341,343	363,209,500	1237.9%	110,819	10,039,302	124,274,126	1237.9%	1.5335	1.00000	0.0180	0.9910	0.982	0.880	4.47%	0.3422	
2044	25,675,132	359,483,272	1400.1%	108,803	8,408,624	117,731,024	1400.1%	1.5335	1.00000	0.0182	0.9910	0.982	0.875	4.47%	0.3275	
2045	22,349,260	353,666,545	1582.5%	106,647	7,005,903	110,865,119	1582.5%	1.5335	1.00000	0.0198	0.9910	0.980	0.870	4.47%	0.3135	
2046	19,351,554	345,866,058	1787.3%	104,412	5,806,381	103,776,163	1787.3%	1.5335	1.00000	0.0210	0.9910	0.979	0.866	4.47%	0.3000	
2047	16,666,321	336,223,534	2017.4%	102,117	4,786,501	96,562,052	2017.4%	1.5335	1.00000	0.0220	0.9910	0.978	0.861	4.47%	0.2872	
2048	14,275,894	324,899,000	2275.9%	99,591	3,924,349	89,313,163	2275.9%	1.5335	1.00000	0.0247	0.9910	0.975	0.857	4.47%	0.2749	
2049	12,161,688	312,998,111	2566.2%	96,933	3,199,998	82,119,623	2566.2%	1.5335	1.00000	0.0267	0.9910	0.973	0.852	4.47%	0.2631	
2050	10,305,226	298,037,229	2892.1%	94,059	2,595,387	75,061,120	2892.1%	1.5335	1.00000	0.0296	0.9910	0.970	0.847	4.47%	0.2519	
2051	8,685,198	282,955,577	3257.9%	90,994	2,093,693	68,210,541	3257.9%	1.5335	1.00000	0.0326	0.9910	0.967	0.843	4.47%	0.2411	
2052	7,280,078	267,071,741	3668.5%	87,512	1,679,802	61,624,001	3668.5%	1.5335	1.00000	0.0383	0.9910	0.962	0.838	4.47%	0.2307	
2053	6,068,406	250,581,306	4129.3%	83,489	1,340,248	55,342,572	4129.3%	1.5335	1.00000	0.0460	0.9910	0.954	0.834	4.47%	0.2209	
2054	5,031,073	233,760,742	4646.3%	79,488	1,063,555	49,416,384	4646.3%	1.5335	1.00000	0.0479	0.9910	0.952	0.829	4.47%	0.2114	
2055	4,149,324	216,864,464	5226.5%	75,514	839,586											

**Attachment 9-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases)**

	Calendar Year	Loss Ratio Demonstration								Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors	
		Without Interest				With Interest				Premium		Persistence Factors		Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor		
		Earned Premium	Paid Claims	Loss Ratio	Life Years	Earned Premium	Paid Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistence			Premium Persistence	
Historical Experience	1989	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	3.6378
	1990	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	3.4819
	1991	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	3.3328
	1992	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	3.1901
	1993	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	3.0534
	1994	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	2.9226
	1995	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	2.7975
	1996	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	2.6777
	1997	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	2.5630
	1998	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	4.47%	2.4532
	1999	71,094	-	0.0%	324	166,936	-	0.0%	-	-	-	-	-	-	-	4.47%	2.3481
	2000	467,489	1,025	0.2%	1,468	1,050,703	2,304	0.2%	1.4356	N/A	0.0131	N/A	0.987	0.985	4.47%	2.2475	
	2001	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%	1.4356	N/A	0.0119	N/A	0.988	0.956	4.47%	2.1513	
	2002	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%	1.4356	N/A	0.0169	N/A	0.983	0.955	4.47%	2.0591	
	2003	1,727,834	2,902	0.2%	4,005	3,405,469	5,719	0.2%	1.4356	N/A	0.0102	N/A	0.990	0.952	4.47%	1.9709	
	2004	2,659,254	413,895	15.6%	5,075	5,016,761	780,825	15.6%	1.4356	N/A	0.0096	N/A	0.990	0.950	4.47%	1.8865	
	2005	5,407,385	1,025,526	19.0%	7,965	9,764,266	1,851,821	19.0%	1.4356	N/A	0.0088	N/A	0.991	0.943	4.47%	1.8057	
	2006	8,054,419	1,721,859	21.4%	8,115	13,921,156	2,976,039	21.4%	1.4356	N/A	0.0087	N/A	0.991	0.940	4.47%	1.7284	
	2007	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%	1.4356	N/A	0.0085	N/A	0.991	0.948	4.47%	1.6544	
2008	8,468,091	1,872,343	22.1%	8,660	13,409,236	2,964,859	22.1%	1.4356	N/A	0.0102	N/A	0.990	0.952	4.47%	1.5835		
2009	8,649,057	4,714,177	54.5%	8,358	13,109,193	7,145,178	54.5%	1.4356	N/A	0.0099	N/A	0.991	0.945	4.47%	1.5157		
2010	8,397,807	1,169,764	13.9%	8,236	12,183,213	1,697,048	13.9%	1.4356	N/A	0.0088	N/A	0.991	0.940	4.47%	1.4508		
2011	8,220,240	1,801,122	21.9%	7,927	11,414,822	2,501,081	21.9%	1.4356	N/A	0.0087	N/A	0.991	0.938	4.47%	1.3886		
2012	7,831,661	2,558,397	32.7%	7,502	10,409,437	3,400,489	32.7%	1.4356	N/A	0.0085	N/A	0.992	0.936	4.47%	1.3291		
2013	8,670,849	2,354,141	27.2%	7,032	11,031,224	2,994,984	27.2%	1.4356	N/A	0.0100	N/A	0.991	0.933	4.47%	1.2722		
2014	9,869,254	2,352,917	23.8%	6,822	12,018,081	2,865,216	23.8%	1.4356	N/A	0.0086	N/A	0.991	0.930	4.47%	1.2177		
2015	9,562,284	1,489,056	15.6%	6,668	11,145,540	1,735,603	15.6%	1.4356	N/A	0.0103	N/A	0.990	0.927	4.47%	1.1656		
2016	9,351,568	1,527,965	16.3%	6,482	10,433,083	1,704,675	16.3%	1.4356	N/A	0.0100	N/A	0.991	0.930	4.47%	1.1157		
2017	9,183,735	969,322	10.6%	6,366	9,807,002	1,035,107	10.6%	1.4356	N/A	0.0099	N/A	0.990	0.916	4.47%	1.0679		
2018	8,834,882	144,949	1.6%	6,230	9,030,387	148,157	1.6%	1.4356	N/A	0.0103	N/A	0.990	0.916	4.47%	1.0221		
Projected Future Experience	2019	8,699,916	723,877	8.3%	6,149	8,511,564	708,205	8.3%	1.4356	N/A	0.0131	N/A	0.987	0.985	4.47%	0.9784	
	2020	8,318,096	2,040,694	24.5%	6,075	7,789,454	1,911,001	24.5%	1.4356	N/A	0.0119	N/A	0.988	0.956	4.47%	0.9364	
	2021	7,940,325	3,194,049	40.2%	5,973	7,117,215	2,862,948	40.2%	1.4356	N/A	0.0169	N/A	0.983	0.955	4.47%	0.8963	
	2022	7,560,271	56,131	0.7%	6,011	6,486,312	56,131	0.7%	1.4356	N/A	0.0102	N/A	0.990	0.952	4.47%	0.8579	
	2023	7,184,617	5,202,317	72.4%	5,855	5,900,012	4,272,146	72.4%	1.4356	N/A	0.0096	N/A	0.990	0.950	4.47%	0.8212	
	2024	6,809,792	6,070,439	89.1%	5,800	5,352,686	4,771,534	89.1%	1.4356	N/A	0.0094	N/A	0.991	0.948	4.47%	0.7860	
	2025	6,434,126	6,889,135	107.1%	5,747	4,840,789	5,183,121	107.1%	1.4356	N/A	0.0091	N/A	0.991	0.945	4.47%	0.7524	
	2026	6,064,942	7,614,784	125.6%	5,696	4,367,591	5,483,691	125.6%	1.4356	N/A	0.0089	N/A	0.991	0.943	4.47%	0.7201	
	2027	5,703,221	8,274,901	145.1%	5,646	3,931,192	5,703,834	145.1%	1.4356	N/A	0.0088	N/A	0.991	0.940	4.47%	0.6893	
	2028	5,351,349	8,945,921	167.2%	5,597	3,530,662	5,902,254	167.2%	1.4356	N/A	0.0087	N/A	0.991	0.940	4.47%	0.6598	
	2029	5,009,499	9,641,402	192.5%	5,549	3,163,558	6,088,660	192.5%	1.4356	N/A	0.0085	N/A	0.992	0.936	4.47%	0.6315	
	2030	4,675,896	10,340,940	221.2%	5,499	2,826,409	6,250,723	221.2%	1.4356	N/A	0.0090	N/A	0.991	0.933	4.47%	0.6045	
	2031	4,350,735	11,046,549	253.9%	5,452	2,517,222	6,391,246	253.9%	1.4356	N/A	0.0086	N/A	0.991	0.930	4.47%	0.5786	
	2032	4,034,431	11,771,134	291.6%	5,401	2,234,240	6,518,774	291.6%	1.4356	N/A	0.0084	N/A	0.991	0.927	4.47%	0.5538	
	2033	3,727,094	12,506,222	335.5%	5,356	1,975,635	6,629,221	335.5%	1.4356	N/A	0.0083	N/A	0.992	0.924	4.47%	0.5301	
	2034	3,429,604	13,239,062	386.0%	5,300	1,740,079	6,717,108	386.0%	1.4356	N/A	0.0104	N/A	0.990	0.920	4.47%	0.5074	
	2035	3,142,201	13,959,056	444.2%	5,247	1,525,976	6,779,066	444.2%	1.4356	N/A	0.0100	N/A	0.990	0.916	4.47%	0.4856	
	2036	2,865,109	14,652,858	511.4%	5,195	1,331,814	6,811,219	511.4%	1.4356	N/A	0.0099	N/A	0.990	0.912	4.47%	0.4648	
	2037	2,599,766	15,302,207	588.6%	5,142	1,156,713	6,906,404	588.6%	1.4356	N/A	0.0103	N/A	0.990	0.907	4.47%	0.4449	
	2038	2,347,307	15,992,833	677.1%	5,086	999,654	6,768,326	677.1%	1.4356	N/A	0.0109	N/A	0.989	0.903	4.47%	0.4259	
	2039	2,108,382	16,409,005	778.3%	5,028	859,445	6,688,842	778.3%	1.4356	N/A	0.0113	N/A	0.989	0.898	4.47%	0.4076	
	2040	1,883,918	16,833,138	893.5%	4,967	735,054	6,567,838	893.5%	1.4356	N/A	0.0121	N/A	0.988	0.894	4.47%	0.3902	
	2041	1,674,421	17,150,188	1024.2%	4,905	625,332	6,404,939	1024.2%	1.4356	N/A	0.0125	N/A	0.987	0.889	4.47%	0.3735	
	2042	1,480,171	17,353,480	1172.4%	4,841	529,111	6,203,280	1172.4%	1.4356	N/A	0.0130	N/A	0.987	0.884	4.47%	0.3575	
	2043	1,301,194	17,439,371	1340.3%	4,769	445,211	5,966,977	1340.3%	1.4356	N/A	0.0149	N/A	0.985	0.879	4.47%	0.3422	
	2044	1,137,420	17,407,178	1530.5%	4,702	372,506	5,701,040	1530.5%	1.4356	N/A	0.0140	N/A	0.986	0.874	4.47%	0.3275	
	2045	988,775	17,257,299	1745.3%	4,628	309,955	5,409,707	1745.3%	1.4356	N/A	0.0159	N/A	0.984	0.869	4.47%	0.3135	
	2046	854,733	16,990,254	1987.8%	4,559	256,460	5,097,879	1987.8%	1.4356	N/A	0.0149	N/A	0.985	0.864	4.47%	0.3000	
	2047	734,726	16,606,568	2260.2%	4,487	211,010	4,769,340	2260.2%	1.4356	N/A	0.0158	N/A	0.984	0.860	4.47%	0.2872	
	2048	628,120	16,113,662	2565.4%	4,401	172,667	4,429,568	2565.4%	1.4356	N/A	0.0191	N/A	0.981	0.855	4.47%	0.2749	
	2049	533,968	15,528,500	2908.1%	4,296	140,498	4,085,877	2908.1%	1.4356	N/A	0.0238	N/A	0.976	0.850	4.47%	0.2631	
	2050	451,426	14,862,297	3292.3%	4,183	113,692	3,743,092	3292.3%	1.4356	N/A	0.0265	N/A	0.973	0.845	4.47%	0.2519	
	2051	379,516	14,127,699	3722.6%	4,068	91,488	3,405,687	3722.6%	1.4356	N/A	0.0273	N/A	0.973	0.841	4.47%	0.2411	
	2052	317,283	13,344,414	4205.8%	3,939	73,210	3,079,083	4205.8%	1.4356	N/A	0.0318	N/A	0.968	0.836	4.47%	0.2307	
2053	263,772	12,522,857	4747.6%	3,798	58,256	2,765,757	4747.6%	1.4356	N/A	0.0359	N/A	0.964	0.831	4.47%	0.2209		
2054	218,030	11,678,520	5356.4%	3,649	46,091	2,468,807	5356.4%	1.4356	N/A	0.0393	N/A	0.961	0.827	4.47%	0.2114		
2055	179,235	10,824,071	6039.0%	3,502	36,267	2,190,175	6039.0%	1.4356	N/A	0.0402	N/A	0.960	0.822	4.47%	0.2023		
2056	146,523	9,968,274	6803.2%	3,323	28,378	1,930,620	6803.2%	1.4356	N/A	0.0511	N/A	0.949	0.817	4.47%	0.1937		
2057	119,099	9,117,435	7655.4%	3,099	22,079	1,690,200	7655.4%	1.4356	N/A	0.0672	N/A	0.933	0.813	4.47%	0.1854		
2058	96,221	8,285,547	8610.9%	2,844	17,074	1,470,197	8610.9%	1.4356	N/A	0.0825	N/A	0.918	0.808	4.47%	0.1774		
2059	77,244	7,477,263	9680.0%	2,611	13,119	1,269,947	9680.0%	1.4356	N/A	0.0818	N/A	0.918	0.803	4.47%	0.1698		

**Attachment 9-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases) and With 6.83% Future Increase**

	Calendar Year	Loss Ratio Demonstration						Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors		
		Without Interest			With Interest			Premium		Persistency		Policy		Calendar Year	Mid-Year	
		Earned Premium	Paid Claims	Loss Ratio	Life Years	Earned Premium	Paid Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Shock Policy Lapse	Policy Persistency	Premium Persistency	Effective In Rate	Disc / Accum Factor
Historical Experience	1989	-	-	N/A	-	-	N/A								4.47%	3.6378
	1990	-	-	N/A	-	-	N/A								4.47%	3.4819
	1991	-	-	N/A	-	-	N/A								4.47%	3.3328
	1992	-	-	N/A	-	-	N/A								4.47%	3.1901
	1993	-	-	N/A	-	-	N/A								4.47%	3.0534
	1994	-	-	N/A	-	-	N/A								4.47%	2.9226
	1995	-	-	N/A	-	-	N/A								4.47%	2.7975
	1996	-	-	N/A	-	-	N/A								4.47%	2.6777
	1997	-	-	N/A	-	-	N/A								4.47%	2.5630
	1998	-	-	N/A	-	-	N/A								4.47%	2.4532
	1999	71,094	-	0.0%	324	166,936	-	0.0%							4.47%	2.3481
	2000	467,489	1,025	0.2%	1,468	1,050,703	2,304	0.2%							4.47%	2.2475
	2001	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%							4.47%	2.1513
	2002	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%							4.47%	2.0591
	2003	1,727,834	2,902	0.2%	4,005	3,405,469	5,719	0.2%							4.47%	1.9709
	2004	2,659,254	413,895	15.6%	5,075	5,016,761	780,825	15.6%							4.47%	1.8865
	2005	5,407,385	1,026,526	19.0%	7,964	9,764,266	1,851,821	19.0%							4.47%	1.8057
	2006	8,054,419	1,721,859	21.4%	8,115	13,921,156	2,976,039	21.4%							4.47%	1.7284
	2007	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%							4.47%	1.6544
	2008	8,468,091	1,872,343	22.1%	8,660	13,409,236	2,964,859	22.1%							4.47%	1.5835
	2009	8,649,057	4,714,177	54.5%	8,358	13,109,193	7,145,178	54.5%							4.47%	1.5157
2010	8,397,807	1,169,764	13.9%	8,236	12,193,213	1,697,048	13.9%							4.47%	1.4508	
2011	8,220,240	2,180,122	27.2%	7,927	11,414,822	2,501,081	27.2%							4.47%	1.3886	
2012	7,831,661	2,558,397	32.7%	7,502	10,409,437	3,400,489	32.7%							4.47%	1.3291	
2013	8,670,849	2,354,141	27.2%	7,032	11,031,224	2,994,984	27.2%							4.47%	1.2722	
2014	9,869,254	2,352,917	23.8%	6,822	12,018,081	2,865,216	23.8%							4.47%	1.2177	
2015	9,562,284	1,489,056	15.6%	6,688	11,145,540	1,735,603	15.6%							4.47%	1.1656	
2016	9,351,568	1,527,965	16.3%	6,482	10,433,083	1,704,675	16.3%							4.47%	1.1157	
2017	9,183,735	969,322	10.6%	6,366	9,807,002	1,035,107	10.6%							4.47%	1.0679	
2018	8,834,882	144,949	1.6%	6,230	9,030,387	148,157	1.6%							4.47%	1.0221	
Projected Future Experience	2019	8,699,916	723,877	8.3%	6,149	8,511,564	708,205	8.3%	1.4356	1.00000	0.0131	1.0000	0.987	0.985	4.47%	0.9784
	2020	8,481,672	2,034,572	24.0%	6,057	7,942,634	1,905,268	24.0%	1.4683	1.00000	0.0149	0.9970	0.985	0.956	4.47%	0.9364
	2021	8,430,964	3,174,885	37.7%	5,937	7,556,993	2,845,770	37.7%	1.5335	1.00000	0.0198	0.9940	0.980	0.955	4.47%	0.8963
	2022	8,003,198	4,201,016	52.5%	5,858	6,866,321	3,604,250	52.5%	1.5335	1.00000	0.0132	0.9910	0.987	0.952	4.47%	0.8579
	2023	7,605,537	5,155,496	67.8%	5,802	6,245,671	4,233,696	67.8%	1.5335	1.00000	0.0096	0.9910	0.990	0.950	4.47%	0.8212
	2024	7,208,752	6,015,805	83.5%	5,747	5,666,280	4,728,590	83.5%	1.5335	1.00000	0.0094	0.9910	0.991	0.948	4.47%	0.7860
	2025	6,811,077	6,827,133	100.2%	5,695	5,124,393	5,136,473	100.2%	1.5335	1.00000	0.0091	0.9910	0.991	0.945	4.47%	0.7524
	2026	6,420,264	7,546,251	117.5%	5,644	4,623,472	5,434,338	117.5%	1.5335	1.00000	0.0089	0.9910	0.991	0.943	4.47%	0.7201
	2027	6,037,351	8,200,427	135.8%	5,595	4,161,506	5,652,500	135.8%	1.5335	1.00000	0.0088	0.9910	0.991	0.940	4.47%	0.6895
	2028	5,664,865	8,865,408	156.5%	5,546	3,737,510	5,840,133	156.5%	1.5335	1.00000	0.0087	0.9910	0.991	0.938	4.47%	0.6598
	2029	5,302,986	9,554,629	180.2%	5,499	3,348,899	6,033,862	180.2%	1.5335	1.00000	0.0085	0.9910	0.992	0.936	4.47%	0.6315
	2030	4,949,839	10,247,871	207.0%	5,450	2,991,998	6,194,466	207.0%	1.5335	1.00000	0.0090	0.9910	0.991	0.933	4.47%	0.6045
	2031	4,605,628	10,947,130	237.7%	5,403	2,664,697	6,333,725	237.7%	1.5335	1.00000	0.0086	0.9910	0.991	0.930	4.47%	0.5786
	2032	4,270,793	11,665,193	273.1%	5,352	2,365,136	6,460,105	273.1%	1.5335	1.00000	0.0094	0.9910	0.991	0.927	4.47%	0.5538
	2033	3,945,451	12,393,666	314.1%	5,308	2,091,380	6,569,558	314.1%	1.5335	1.00000	0.0083	0.9910	0.992	0.924	4.47%	0.5301
	2034	3,630,531	13,119,911	361.4%	5,253	1,842,024	6,656,654	361.4%	1.5335	1.00000	0.0104	0.9910	0.990	0.920	4.47%	0.5074
	2035	3,326,290	13,833,425	415.9%	5,200	1,615,377	6,718,054	415.9%	1.5335	1.00000	0.0100	0.9910	0.990	0.916	4.47%	0.4856
	2036	3,032,965	14,520,983	478.8%	5,149	1,409,840	6,749,918	478.8%	1.5335	1.00000	0.0099	0.9910	0.990	0.912	4.47%	0.4648
	2037	2,752,076	15,164,487	551.0%	5,096	1,224,480	6,747,128	551.0%	1.5335	1.00000	0.0103	0.9910	0.990	0.907	4.47%	0.4449
	2038	2,484,798	15,749,798	633.8%	5,040	1,058,220	6,707,411	633.8%	1.5335	1.00000	0.0109	0.9910	0.989	0.903	4.47%	0.4259
	2039	2,231,904	16,261,324	728.6%	4,983	909,796	6,628,642	728.6%	1.5335	1.00000	0.0113	0.9910	0.989	0.898	4.47%	0.4076
	2040	1,994,290	16,681,640	836.5%	4,923	778,118	6,508,728	836.5%	1.5335	1.00000	0.0121	0.9910	0.988	0.894	4.47%	0.3902
	2041	1,772,519	16,995,837	958.9%	4,861	661,968	6,347,294	958.9%	1.5335	1.00000	0.0125	0.9910	0.987	0.889	4.47%	0.3735
	2042	1,566,889	17,197,298	1097.5%	4,798	560,110	6,147,450	1097.5%	1.5335	1.00000	0.0130	0.9910	0.987	0.884	4.47%	0.3575
	2043	1,377,426	17,282,417	1254.7%	4,726	471,294	5,913,274	1254.7%	1.5335	1.00000	0.0149	0.9910	0.985	0.879	4.47%	0.3422
	2044	1,204,057	17,251,049	1432.7%	4,660	394,330	5,649,731	1432.7%	1.5335	1.00000	0.0140	0.9910	0.985	0.874	4.47%	0.3275
	2045	1,046,704	17,101,983	1633.9%	4,586	328,114	5,361,020	1633.9%	1.5335	1.00000	0.0159	0.9910	0.984	0.869	4.47%	0.3135
	2046	904,808	16,837,341	1860.9%	4,517	271,485	5,051,998	1860.9%	1.5335	1.00000	0.0149	0.9910	0.985	0.864	4.47%	0.3000
	2047	777,771	16,457,109	2115.9%	4,446	223,373	4,726,416	2115.9%	1.5335	1.00000	0.0158	0.9910	0.984	0.860	4.47%	0.2872
	2048	664,919	15,968,639	2401.6%	4,361	182,783	4,389,702	2401.6%	1.5335	1.00000	0.0191	0.9910	0.981	0.855	4.47%	0.2749
2049	565,251	15,388,743	2722.5%	4,258	148,730	4,040,104	2722.5%	1.5335	1.00000	0.0238	0.9910	0.976	0.850	4.47%	0.2631	
2050	477,873	14,728,537	3082.1%	4,145	120,353	3,709,404	3082.1%	1.5335	1.00000	0.0265	0.9910	0.973	0.845	4.47%	0.2519	
2051	401,750	14,000,550	3484.9%	4,032	96,848	3,375,035	3484.9%	1.5335	1.00000	0.0273	0.9910	0.973	0.841	4.47%	0.2411	
2052	335,872	13,224,314	3937.3%	3,904	77,499	3,051,372	3937.3%	1.5335	1.00000	0.0318	0.9910	0.968	0.836	4.47%	0.2307	
2053	279,226	12,410,151	4444.5%	3,764	61,669	2,740,866	4444.5%	1.5335	1.00000	0.0359	0.9910	0.964	0.831	4.47%	0.2209	
2054	230,803	11,573,413	5014.4%	3,616	48,791	2,446,588	5014.4%	1.5335	1.00000	0.0393	0.9910	0.961	0.827	4.47%	0.2114	
2055	189,736	10,726,654	5653.5%	3,470	38,392	2,170,463	5653.5%	1.5335	1.00000	0.0402	0.9910	0.960	0.822	4.47%	0.2023	
2056	155,108	9,878,559	6368.8%	3,293	30,041	1,913,244	6368.8%	1.5335	1.00000	0.0511	0.9910	0.949	0.817	4.47%	0.1937	
2057	126,076	9,035,378	7166.6%	3,072	23,372	1,674,989	7166.6%	1.5335	1.00000	0.0672	0.9910	0.933	0.813	4.47%	0.1854	
2058	101,859	8,210,977	8061.1%	2,818	18,074	1,456,965	8061.1%	1.5335	1.00000	0.0825	0.9910	0.918	0.808	4.47%	0.1774	
2059	81,770	7,409,968	9062.0%	2,588	13,888	1,258,518	9062.0%	1.5335	1.00000	0.0818	0.9910	0.918	0.803	4.47%	0.1698	
2060	65,263	6,645,400	10182.5%	2,376	10,610	1,080,321	10182.5%	1.5335	1.00000	0.0817	0.9910	0.918	0.798	4.47%	0.1626	

**Attachment 16**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections on Initial Rate Basis With No Rate Increase**

	Calendar Year	Loss Ratio Demonstration						Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors		
		Without Interest			With Interest			Premium		Persistence Factors				Calendar Year	Mid-Year	
		Earned Premium	Incurred Claims	Loss Ratio	Life Expectancy	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistence	Premium Persistence	Effective In Rate	Disc / Accum Factor
Historical Experience	1989	73,088	-	0.0%	2,649	265,877	-	0.0%							4.47%	3.6378
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%							4.47%	3.4819
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%							4.47%	3.3328
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%							4.47%	3.1901
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%							4.47%	3.0534
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%							4.47%	2.9226
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%							4.47%	2.7975
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%							4.47%	2.6777
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%							4.47%	2.5630
	1998	43,940,449	7,714,265	17.6%	82,595	107,794,308	18,924,565	17.6%							4.47%	2.4532
	1999	48,097,051	19,963,200	41.5%	95,693	112,937,587	46,875,964	41.5%							4.47%	2.3481
	2000	55,598,283	16,502,514	29.7%	111,642	124,959,751	37,090,176	29.7%							4.47%	2.2475
	2001	66,614,492	24,068,185	36.1%	138,474	143,306,604	51,777,469	36.1%							4.47%	2.1513
	2002	76,962,588	25,845,554	33.6%	154,041	158,476,862	53,219,655	33.6%							4.47%	2.0591
	2003	84,734,429	28,607,127	33.8%	161,514	167,007,058	56,383,127	33.8%							4.47%	1.9709
	2004	93,549,570	29,417,980	31.4%	177,688	176,484,037	55,497,910	31.4%							4.47%	1.8865
	2005	106,389,491	35,602,802	33.5%	193,671	192,110,489	64,288,978	33.5%							4.47%	1.8057
	2006	121,561,825	36,875,172	30.3%	207,903	210,105,912	63,734,578	30.3%							4.47%	1.7284
	2007	132,858,561	46,491,291	35.0%	211,594	219,795,765	76,913,289	35.0%							4.47%	1.6544
	2008	138,403,077	54,716,840	39.5%	211,070	219,161,487	86,644,201	39.5%							4.47%	1.5835
	2009	141,341,445	50,240,716	35.5%	199,029	214,228,247	76,148,794	35.5%							4.47%	1.5157
2010	141,989,582	48,415,921	34.1%	193,053	205,992,943	70,239,938	34.1%							4.47%	1.4508	
2011	142,889,041	54,545,282	38.2%	187,553	198,419,139	75,742,883	38.2%							4.47%	1.3886	
2012	139,076,413	62,091,189	44.6%	178,477	184,853,140	82,528,381	44.6%							4.47%	1.3291	
2013	135,072,470	63,646,086	47.1%	170,629	171,841,838	80,971,795	47.1%							4.47%	1.2722	
2014	133,047,183	70,214,415	52.8%	165,636	162,015,463	85,502,156	52.8%							4.47%	1.2177	
2015	131,195,485	85,340,894	65.0%	160,865	152,917,922	90,471,046	65.0%							4.47%	1.1656	
2016	131,276,736	95,493,013	72.7%	156,155	146,458,973	106,536,839	72.7%							4.47%	1.1157	
2017	130,119,415	124,213,565	95.5%	151,817	138,950,153	132,643,494	95.5%							4.47%	1.0679	
2018	125,961,493	140,540,754	111.6%	147,355	128,748,875	143,650,758	111.6%							4.47%	1.0221	
Projected Future Experience	2019	125,279,328	134,979,417	107.7%	145,563	122,567,061	132,057,145	107.7%	1.0000	N/A	0.0122	N/A	0.988	0.995	4.47%	0.9784
	2020	120,187,948	144,912,977	120.6%	143,936	112,549,609	135,703,282	120.6%	1.0000	N/A	0.0112	N/A	0.989	0.959	4.47%	0.9364
	2021	115,124,838	155,042,377	134.7%	141,622	103,190,762	138,970,368	134.7%	1.0000	N/A	0.0161	N/A	0.984	0.958	4.47%	0.8963
	2022	110,083,108	165,545,413	150.4%	140,234	94,445,481	142,029,204	150.4%	1.0000	N/A	0.0098	N/A	0.990	0.956	4.47%	0.8579
	2023	105,042,870	176,551,435	168.1%	138,939	86,261,260	144,984,131	168.1%	1.0000	N/A	0.0092	N/A	0.991	0.954	4.47%	0.8212
	2024	99,979,526	188,099,230	188.1%	137,694	78,586,692	147,851,233	188.1%	1.0000	N/A	0.0090	N/A	0.991	0.952	4.47%	0.7860
	2025	94,892,642	200,133,440	210.9%	136,495	71,393,584	150,572,724	210.9%	1.0000	N/A	0.0087	N/A	0.991	0.949	4.47%	0.7524
	2026	89,623,777	212,548,270	236.6%	135,320	64,685,461	153,363,967	236.6%	1.0000	N/A	0.0086	N/A	0.991	0.947	4.47%	0.7201
	2027	84,741,305	225,146,784	265.7%	134,175	58,412,030	155,192,177	265.7%	1.0000	N/A	0.0085	N/A	0.992	0.943	4.47%	0.6893
	2028	79,682,334	237,971,315	298.7%	133,053	52,572,041	157,006,417	298.7%	1.0000	N/A	0.0084	N/A	0.992	0.940	4.47%	0.6598
	2029	74,716,749	250,810,517	335.7%	131,949	47,184,513	158,389,815	335.7%	1.0000	N/A	0.0083	N/A	0.992	0.938	4.47%	0.6315
	2030	69,806,767	263,449,743	377.4%	130,844	42,195,656	159,245,805	377.4%	1.0000	N/A	0.0084	N/A	0.992	0.934	4.47%	0.6045
	2031	64,974,716	275,330,380	424.4%	129,759	37,592,684	159,530,438	424.4%	1.0000	N/A	0.0083	N/A	0.992	0.931	4.47%	0.5786
	2032	60,253,872	287,376,392	476.9%	128,634	33,368,187	159,147,104	476.9%	1.0000	N/A	0.0087	N/A	0.991	0.927	4.47%	0.5538
	2033	55,637,671	298,176,293	535.9%	127,506	29,492,074	158,055,451	535.9%	1.0000	N/A	0.0088	N/A	0.991	0.923	4.47%	0.5301
	2034	51,140,877	307,844,461	602.0%	126,339	25,947,364	156,191,152	602.0%	1.0000	N/A	0.0092	N/A	0.991	0.919	4.47%	0.5074
	2035	46,805,524	315,998,872	675.1%	125,087	22,730,601	153,461,462	675.1%	1.0000	N/A	0.0099	N/A	0.990	0.915	4.47%	0.4856
	2036	42,627,112	322,439,051	756.4%	123,802	19,814,742	149,882,231	756.4%	1.0000	N/A	0.0103	N/A	0.990	0.911	4.47%	0.4648
	2037	38,622,038	327,292,139	847.4%	122,405	17,184,885	145,622,017	847.4%	1.0000	N/A	0.0113	N/A	0.989	0.906	4.47%	0.4449
	2038	34,940,436	330,293,108	948.0%	120,940	14,837,595	140,662,864	948.0%	1.0000	N/A	0.0120	N/A	0.988	0.902	4.47%	0.4259
	2039	31,273,398	331,044,062	1058.5%	119,390	12,748,049	134,944,274	1058.5%	1.0000	N/A	0.0128	N/A	0.987	0.898	4.47%	0.4076
2040	27,932,670	329,556,826	1179.8%	117,631	10,898,578	128,584,223	1179.8%	1.0000	N/A	0.0147	N/A	0.985	0.893	4.47%	0.3902	
2041	24,824,193	326,050,406	1313.4%	115,814	9,270,886	121,767,344	1313.4%	1.0000	N/A	0.0155	N/A	0.985	0.889	4.47%	0.3735	
2042	21,949,106	320,644,871	1460.9%	113,879	7,846,060	114,619,656	1460.9%	1.0000	N/A	0.0167	N/A	0.983	0.884	4.47%	0.3575	
2043	19,306,880	313,388,572	1623.2%	111,825	6,605,955	107,227,622	1623.2%	1.0000	N/A	0.0180	N/A	0.982	0.880	4.47%	0.3422	
2044	16,894,478	304,437,745	1802.0%	109,791	5,532,954	99,703,575	1802.0%	1.0000	N/A	0.0182	N/A	0.982	0.875	4.47%	0.3275	
2045	14,706,024	293,941,395	1998.8%	107,616	4,609,950	92,142,862	1998.8%	1.0000	N/A	0.0198	N/A	0.980	0.870	4.47%	0.3135	
2046	12,733,505	282,098,762	2215.4%	105,360	3,820,653	84,642,960	2215.4%	1.0000	N/A	0.0210	N/A	0.979	0.866	4.47%	0.3000	
2047	10,966,596	269,053,633	2453.4%	103,045	3,149,562	77,271,126	2453.4%	1.0000	N/A	0.0220	N/A	0.978	0.861	4.47%	0.2872	
2048	9,393,613	255,126,266	2716.0%	100,496	2,582,259	70,132,976	2716.0%	1.0000	N/A	0.0247	N/A	0.975	0.857	4.47%	0.2749	
2049	8,002,505	240,446,363	3004.6%	97,813	2,105,629	63,266,531	3004.6%	1.0000	N/A	0.0267	N/A	0.973	0.852	4.47%	0.2631	
2050	6,780,936	225,260,499	3322.0%	94,914	1,707,789	56,732,192	3322.0%	1.0000	N/A	0.0296	N/A	0.970	0.847	4.47%	0.2519	
2051	5,714,942	209,824,719	3671.5%	91,821	1,377,670	50,581,289	3671.5%	1.0000	N/A	0.0326	N/A	0.967	0.843	4.47%	0.2411	
2052	4,790,360	194,286,488	4055.8%	88,307	1,105,325	44,829,568	4055.8%	1.0000	N/A	0.0383	N/A	0.962	0.838	4.47%	0.2307	
2053	3,993,089	178,809,370	4478.0%	84,247	881,896	39,491,255	4478.0%	1.0000	N/A	0.0460	N/A	0.954	0.834	4.47%	0.2209	
2054	3,310,494	163,626,550	4942.7%	80,209	699,829	34,590,207	4942.7%	1.0000	N/A	0.0479	N/A	0.952	0.829	4.47%	0.2114	
2055	2,730,294	148,845,570	5451.6%	76,200	552,456	30,117,853	5451.6%	1.0000	N/A	0.0500	N/A	0.950	0.825	4.47%	0.2023	
2056	2,238,763	134,596,659	6009.4%	72,062	433,789	26,068,203	6009.4%	1.0000	N/A	0.0543	N/A	0.946	0.820	4.47%	0.1937	
2057	1,827,311	121,019,745	6622.8%	66,330	338,749	22,434,74										

**Attachment 19**  
**Metropolitan Life Insurance Company**  
**Historial Claim and Active Life Reserves**

**Nationwide**

Calendar Year	A	B	C	D = A + B + C	E
	Paid Claims	Claim Reserves	IBNR	Incurred Claims	Active Life Reserves <sup>1</sup>
1989	-	-		-	
1990	98,323	-		98,323	
1991	142,014	-		142,014	
1992	1,315,222	-		1,315,222	
1993	1,901,925	-		1,901,925	
1994	2,508,403	-		2,508,403	
1995	3,484,114	-		3,484,114	
1996	6,221,356	-		6,221,356	
1997	3,361,627	-		3,361,627	
1998	7,400,663	313,602		7,714,265	
1999	19,903,012	60,188		19,963,200	
2000	15,341,470	1,161,045		16,502,514	
2001	23,296,986	771,199		24,068,185	
2002	25,824,880	20,674		25,845,554	
2003	27,262,857	1,344,269		28,607,127	
2004	29,011,708	406,281		29,417,990	
2005	33,953,523	1,649,278		35,602,802	
2006	35,342,958	1,532,214		36,875,172	
2007	45,028,895	1,462,396		46,491,291	
2008	51,819,969	2,896,871		54,716,840	
2009	48,299,312	1,941,404		50,240,716	
2010	46,028,904	2,387,017		48,415,921	
2011	50,689,248	3,856,034		54,545,282	
2012	54,145,282	7,945,907		62,091,189	
2013	53,843,020	9,803,066		63,646,086	
2014	51,316,061	18,898,354		70,214,415	
2015	56,233,400	29,107,494		85,340,894	
2016	41,767,092	53,725,920		95,493,013	
2017	29,221,373	92,206,641	2,785,552	124,213,565	
2018	9,109,991	71,545,302	59,885,461	140,540,754	2,517,954,942

**Pennsylvania Only**

Calendar Year	A	B	C	D = A + B + C	E
	Paid Claims	Claim Reserves	IBNR	Incurred Claims	Active Life Reserves <sup>1</sup>
1999	-	-		-	
2000	1,025	-		1,025	
2001	408,469	-		408,469	
2002	33,979	-		33,979	
2003	2,902	99,513		102,414	
2004	413,895	96,705		510,600	
2005	1,025,526	-		1,025,526	
2006	1,721,859	-		1,721,859	
2007	2,737,692	-		2,737,692	
2008	1,872,343	118,828		1,991,171	
2009	4,714,177	116,498		4,830,675	
2010	1,169,764	405,670		1,575,434	
2011	1,801,122	78,535		1,879,657	
2012	2,558,397	437,658		2,996,055	
2013	2,354,141	245,653		2,599,794	
2014	2,352,917	689,901		3,042,819	
2015	1,489,056	817,127		2,306,183	
2016	1,527,965	1,791,087		3,319,052	
2017	969,322	3,097,385	80,442	4,147,150	
2018	144,949	1,266,598	1,729,393	3,140,941	104,020,196

<sup>1</sup> Figure as of 12/31/2018



Metropolitan Life Insurance Company  
Long-Term Care  
P.O. Box 990028  
Hartford, CT 06199-0028

## Metropolitan Life Insurance Company

[Mail Date]

Group Name: [Group Name]  
Group No: [Group Number]

[First Name] [Last Name]  
[Address 1]  
[Address 2]  
[City, ST Zip or Country Name if Foreign address]

 New Long Term Care Insurance coverage rates effective [DATE].

## Premium (Contribution) Increase Notification – Please review

---

### Why MetLife is contacting you

#### **[Insert this paragraph for insureds who ARE NOT on premium waiver:]**

This letter is to inform you that we are implementing a [XX%] premium (contribution) increase on your long-term care insurance certificate scheduled to take place on [Date], (“Effective Date of Increase”). Please note that we requested a [XX%] increase on your certificate and received authority from the [STATE] insurance regulator to implement the [XX%] increase on your certificate. Please read below for information about your current and increased premium amounts, as well as options that may be available to you to lessen the impact of the rate increase. **If you choose to maintain your current coverage at the increased premium, you need not take any action at this time.**

#### **[Insert this paragraph for insureds who ARE on premium waiver:]**

This letter is to inform you that we are implementing a [XX%] premium (contribution) increase on your long-term care insurance certificate. Please note that we requested a [XX%] increase on your certificate and received authority from the [STATE] insurance regulator to implement the [XX%] increase on your certificate. While the increase is scheduled to take place on [Date], (“Effective Date of Increase”), your premium is currently being waived under the Waiver of Contributions provision in your certificate. As a result, there will be no impact to your premium unless your obligation to make premium payments resumes per the terms of the Waiver of Contributions provision. Please read below for information about your current and increased premium amounts, as well as options that may be available to you to lessen the impact of the rate increase. **If you choose to maintain your current coverage at the increased premium, you need not take any action at this time.**

### What you need to know

#### **[Insert this sentence for insureds issued in CA:]**

[This premium increase was filed by Metropolitan Life Insurance Company (MetLife) and authorized by the appropriate state regulator, where required. Please note, however, that the California Department of Insurance did not review, acknowledge, or approve this rate increase request.] This premium increase impacts a broad group of certificateholders and is not based on any individual’s personal factors such as age, health status or claims history. We understand how important your long-term care insurance coverage is to your personal financial plan. The decision to implement an additional premium increase was a difficult one and not taken lightly.

**[Insert this paragraph for insureds who ARE NOT on premium waiver:]**

We requested a [XX%] increase on your certificate and received authority from the [STATE] insurance regulator to implement the [XX%] increase on your certificate. Please read below for information about your current and increased premium amounts, as well as options that may be available to you to lessen the impact of the rate increase. **If you choose to maintain your current coverage at the increased premium, you need not take any action at this time.**

**[Insert this paragraph for insureds who ARE on premium waiver:]**

We requested a [XX%] increase on your certificate and received authority from the [STATE] insurance regulator to implement the [XX%] increase on your certificate. While the increase is scheduled to take place on [Date], ("Effective Date of Increase"), your premium is currently being waived under the Waiver of Contributions provision in your certificate. As a result, there will be no impact to your premium unless your obligation to make premium payments resumes per the terms of the Waiver of Contributions provision. Please read below for information about your current and increased premium amounts, as well as options that may be available to you to lessen the impact of the rate increase. **If you choose to maintain your current coverage at the increased premium, you need not take any action at this time.**

**[Insert for insureds who ARE NOT on premium waiver:]**

The premium amount for your long-term care insurance coverage is scheduled to increase as indicated below on the Effective Date of Increase. Please note that the information regarding your current coverage provided in this letter may not reflect any recent coverage changes that have occurred or are scheduled to occur. In addition, it is important to note that depending on the date your coverage is currently paid through, you may receive an interim direct bill that reflects the difference in the increased amount owed and the amount that was paid prior to this announcement. The interim bill may be applicable to all bill modes and frequencies.

**[Insert for insureds who ARE on premium waiver:]**

Your obligation to make premium payments resumes per the terms of the Waiver of Contributions provision in your certificate. Prior to the effective date of the increase, your premium rate increase will not take effect until the effective date of the increase. If your obligation to make premium payments resumes after the effective date of the increase, you will be responsible for the increased premium rate at that time. Please note that the information regarding your current coverage provided in this letter may not reflect any recent coverage changes that have occurred or are scheduled to occur.

Effective Date:	[EFFECTIVE DATE]
Current Premium Amount:	[OLD AMOUNT]/[FREQUENCY]
Increased Premium Amount:	[NEW AMOUNT]/[FREQUENCY]

## Your Options

MetLife understands that a premium increase may not be affordable for some insureds. Therefore, we are offering you personalized options, if available, to help reduce the impact of the premium increase. Please review the enclosed Coverage Change Form to see what options are available to you. Please note that all options available may not be of equal value, based on your personal situation.

## Things to consider

It is important that you be aware that, as explained in the Guaranteed Renewability statement in your policy, and subject to any applicable regulatory approval, **MetLife reserves the right to increase rates in the future.** [Because the increase requested was higher than the increase being implemented at this time, it is our intent to request an additional increase, and if authorized, the additional increase will be implemented no sooner than one year from the date indicated above.] [However, MetLife will not implement another premium rate increase for a period of [X] years [from the effective date of this increase.]]

Please note that any changes in your coverage that cause your premium to increase that take effect between now and the Effective Date of Increase will be calculated at the **increased** rates. If you are set up for automatic deductions, you do not need to take any action. The increased premium will be deducted on the next scheduled deduction date after the rate increase effective date.

## Cancellation Requests

If you choose to cancel your Long Term Care Insurance Coverage with MetLife, a limited long term care benefit may still be available to you. Please carefully evaluate your individual situation before selecting one of these options. We believe that long term care insurance should be considered in every financial plan and encourage you to maintain your certificate to retain the valuable protection it provides.

### [A. Insert for insureds with no nonforfeiture feature (applies to insureds with CBUL):]

If your coverage lapses due to cancellation or nonpayment of premium at any time between the date of this letter and 120 days from the effective date of the rate increase, you will be issued a Limited Coverage Upon Lapse Following Premium Increase Endorsement ("LCUL"), which provides limited coverage as described below. *(Please note that this limited coverage does not provide the same level of coverage you currently have.)* Under LCUL, your Total Lifetime Benefit will be the greater of: the sum of all premiums paid and waived prior to lapse **or** 30 times the Nursing Home Daily Benefit Amount in effect immediately prior to your date of lapse. However, please note that the reduced Total Lifetime Benefit payable under LCUL will not exceed the remaining Total Lifetime Benefit in effect immediately prior to your date of lapse. Once LCUL goes into effect, your certificate will be considered "paid-up" with no further premiums due, and you will no longer receive increases under any inflation option.

Note: For certificateholders who are eligible for, and meet the requirements for payment of, benefits under the Contingent Benefit Upon Lapse Nonforfeiture Feature ("CBUL") as a result of this rate increase, we will instead provide coverage under LCUL, which provides a benefit that is equal to the benefit payable under CBUL. We will not pay benefits under both CBUL and LCUL.

### [B. Insert for insureds with nonforfeiture feature that will pay benefits less than those of LCUL:]

If your coverage lapses due to cancellation or nonpayment of premium at any time between the date of this letter and 120 days from the effective date of the rate increase, you will be issued a Limited Coverage Upon Lapse Following Premium Increase Endorsement ("LCUL"), which provides limited coverage as described below. *(Please note that this limited coverage does not provide the same level of coverage you currently have.)* Under LCUL, your Total Lifetime Benefit will be the greater of: the sum of all premiums paid and waived prior to lapse; **or** 30 times the Nursing Home Daily Benefit Amount in effect immediately prior to your date of lapse. However, please note that the reduced Total Lifetime Benefit payable under LCUL will not exceed the remaining Total Lifetime Benefit in effect immediately prior to your date of lapse. Once LCUL goes into effect, your certificate will be

considered “paid-up” with no further premiums due, and you will no longer receive increases under any inflation option.

Our records indicate your certificate currently includes a nonforfeiture coverage provision. However, the amount of coverage available under the nonforfeiture coverage provision included in your certificate in the event of lapse is less than what would be provided under LCUL. If you lapse at any time between the date of this letter and 120 days from the effective date of the rate increase, we will provide nonforfeiture coverage under LCUL instead of the nonforfeiture coverage feature included in your certificate since LCUL will provide a greater benefit. We will not pay benefits under both LCUL and the nonforfeiture coverage provision included in your coverage.

**[C. Insert for insureds who will be provided a choice between their current nonforfeiture feature and LCUL:]**

Our records indicate your certificate includes a nonforfeiture coverage provision that provides for reduced or limited coverage in the event that your certificate lapses due to cancellation or nonpayment of premium. Please refer to your certificate for additional information. If your coverage lapses, you are eligible for the limited coverage as described in your certificate.

Alternatively, if your coverage lapses at any time between the date of this letter and 120 days from the effective date of the rate increase, you may elect in writing to receive limited coverage under a Limited Coverage Upon Lapse Following Premium Increase Endorsement (“LCUL”) **instead of** the nonforfeiture coverage provision included in your certificate. *(Please note that both LCUL and the nonforfeiture coverage provision in your certificate provide limited coverage and do not provide the same level of coverage you currently have.)* Under LCUL, your Total Lifetime Benefit will be the greater of: the sum of all premiums paid and waived prior to lapse; **or** 30 times the Nursing Home Daily Benefit Amount in effect immediately prior to your date of lapse. However, please note that the reduced Total Lifetime Benefit payable under LCUL will not exceed the remaining Total Lifetime Benefit in effect immediately prior to your date of lapse. Once LCUL goes into effect, your certificate will be considered “paid-up” with no further premiums due, and you will no longer receive increases under any inflation option.

If your coverage lapses at any time between the date of this letter and 120 days from the effective date of the rate increase, we are providing you a choice between the nonforfeiture coverage provision included in your certificate and LCUL because the benefits you would receive under the nonforfeiture coverage provision included in your certificate are different than those you would receive under LCUL. We will not pay benefits under both LCUL and the nonforfeiture coverage provision included in your certificate.

If your coverage lapses at any time between the date of this letter and 120 days from the effective date of the rate increase and we do **not** receive a written election from you for LCUL after your lapse but before the end of the 120-day period, we will automatically provide coverage under the nonforfeiture coverage provision included in your certificate and LCUL will no longer be available as an option.

**[D. Insert for insureds with a nonforfeiture value that is greater than or equal to the value of LCUL:]**

Our records indicate your certificate includes a nonforfeiture coverage provision that provides for reduced or limited coverage in the event that your coverage lapses due to cancellation or nonpayment of premium. Please refer to your certificate for additional information. *(Please note that this limited coverage does not provide the same level of coverage you currently have.)*

**[E. Insert for insureds with paid-up coverage with a layer of non-paid up coverage:]**

Our records indicate you are making premium payments on only a portion of your coverage and that the remainder of your coverage is fully paid-up. In the event you stop making premium payments or notify MetLife you do not wish to maintain the portion of your coverage that is not fully paid up, you will retain the portion of your coverage that is fully paid-up. In this case, the portion of your coverage on which you are making premium payments will end. Please be aware that the portion of your coverage that is paid-up is **not** subject to the premium increase.

You may call the customer service team at 1-800-438-6388, Monday through Friday, to discuss your options in more detail.

**Next Steps**

- If you choose to decrease or cancel your coverage, please complete the enclosed Coverage Change / Cancellation Form and return it in the enclosed postage-paid envelope. If you are making a coverage change, we will need to receive your completed form by [Coverage Change Receipt Date] to ensure that any coverage changes take effect on the Effective Date of Increase. Please be advised that under the terms of your certificate, you may make decreases to your coverage at any time.

**[Insert next sentence only for insureds with Cancellation options A or B:]**

- While you are entitled to receive limited coverage under LCUL if your coverage lapses due to cancellation or nonpayment of premium at any time between the date of this letter and 120 days following the first due date of the increased premium, we will still need to receive your completed Coverage Change / Cancellation Form by [Coverage Change Receipt Date] if you wish to ensure that your cancellation is processed before the Effective Date of Increase.

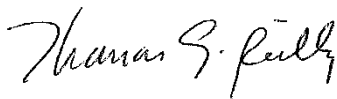
**[Insert next sentence only for insureds with Cancellation option C:]**

- While you are entitled to receive limited coverage under LCUL if you elect LCUL in writing and if your coverage lapses due to cancellation or nonpayment of premium at any time between the date of this letter and 120 days following the first due date of the increased premium, or under the nonforfeiture coverage provision included in your certificate today, we will still need to receive your completed Coverage Change / Cancellation Form by [Coverage Change Receipt Date] if you wish to ensure that your cancellation is processed before the Effective Date of Increase.

**At MetLife we're here to help**

We are ready to assist you. If you have any additional questions, please call our Customer Service team at [1-800-438-6388]. Call center representatives will be pleased to answer any questions or provide additional options to lessen the amount of this increase, if available.

Sincerely,



Thomas G. Reilly, Assistant Vice President  
Product Management & Compliance  
Metropolitan Life Insurance Company  
Encl: [Coverage Change Form, Business Reply Envelope]



Metropolitan Life Long-Term Care  
P.O. Box 99028  
Hartford, CT 06199-0028

**Metropolitan Life Insurance Company**

Group Name: [Group Name]  
Group #: [Group No.]

[First Name] [Middle Initial] [Last Name]

**[Leave out for insureds on Waiver of Contributions:]**

[Increased Premium Amount Date: [Effective Date of Increase]]

## Premium (Contribution) Increase Coverage Change Request Form

**If you intend to maintain your current coverage at the new increased premium, there is no need to return this form.**

Please use this form to request a decrease in your long-term care insurance coverage, if available, or to cancel your coverage. If you have any questions, you can speak with our **Customer Service team at [1-800-438-6488]**.

To request a coverage change check only ONE box below		
<b>Keep current coverage and pay premium increase</b>  <b>(No Action Required)</b>  Daily Benefit Amount: [\$XXX.XX]  Total Lifetime Benefit: [X] Years  Premium: [\$XXX.XX][mode]  <b>Note:</b> If you do not submit a selection, your coverage will remain the same and your new increased premium will become effective on [DATE].	<input type="checkbox"/> <b>Reduce Daily Benefit and Minimize Premium Increase</b>  Daily Benefit Amount: [\$XXX.XX]  Premium: [\$XXX.XX][mode]	<input type="checkbox"/> <b>Reduce Lifetime Benefit and Minimize Premium Increase</b>  Total Lifetime Benefit: [X] Years  Premium: [\$XXX.XX][mode]
	<input type="checkbox"/> <b>Customized Decrease Option</b> <i>Please call the Customer Service team for available options</i>  OTHER _____  You may call the customer service team at the phone number provided above to explore other possible decrease options. Our customer service team will take you through any available options and provide you with instructions on how to complete the section below. <b>Please do not select the Other Coverage Change option if you have not discussed your options with our customer service team.</b>	<input type="checkbox"/> <b>Coverage Termination</b>  <b>[A. or B. Insert for insureds with no nonforfeiture feature (applies to insureds with CBUL) OR insureds with nonforfeiture feature that will pay benefits less than those of LCUL:]</b> <input type="checkbox"/> Please CANCEL my coverage. I understand that I will be provided with coverage under a Limited Coverage Upon Lapse Following Premium Increase Endorsement ("LCUL"). As you consider this option, please note that this is <b>limited</b> coverage and does not provide the same level of coverage you currently have.  <b>[C. Insert for insureds who will be provided with a choice between their current nonforfeiture feature and LCUL:]</b>

		<p><input type="checkbox"/> [Please CANCEL my coverage and apply the limited coverage under the <b>nonforfeiture feature</b> that is included in my certificate. <i>As you consider this option, please note that this is <b>limited</b> coverage and does not provide the same level of coverage you currently have.]</i></p> <p><input type="checkbox"/> [Please CANCEL my coverage and apply the <b>Limited Coverage Upon Lapse Following Premium Increase Endorsement ("LCUL")</b>. I understand in making this selection that I waive my rights under any other nonforfeiture feature. <i>As you consider this option, please note that this is <b>limited</b> coverage and does not provide the same level of coverage you currently have.]</i></p> <p><b>[D. Insert for insureds with a nonforfeiture value that is greater than or equal to the value of LCUL:]</b></p> <p><input type="checkbox"/> [Please CANCEL my coverage. I understand that this will trigger coverage under the nonforfeiture feature that is included in my certificate. <i>As you consider this option, please note that this is <b>limited</b> coverage and does not provide the same level of coverage you currently have.]</i></p> <p><b>[E. Insert for insureds with paid-up coverage with a layer of non-paid-up coverage:]</b></p> <p><input type="checkbox"/> [Please CANCEL the portion of my coverage that is not paid-up. I understand that I will retain the portion of my coverage that is paid-up, and the portion of my coverage on which I am making premium payments will end. <i>Please note that the portion of your coverage that is paid-up is <b>not</b> subject to the premium increase.]</i></p>
--	--	--

I understand the certificate change(s) I have selected above. I agree that any change(s) will become effective on the premium rate increase date outlined above.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Please sign, date and return this form to the address listed below by [Coverage Change Receipt Date]. No Response is required if you are not making any changes.

***Metropolitan Life Insurance Company***  
***[Long-Term Care \* PO Box 14634 \* Lexington, KY \* 40512-9938]***  
***[Phone: 1-800-438-6388]***

**Life, Accident & Health, Annuity, Credit Transmittal Document**

1.	Prepared for the State of	Pennsylvania
----	---------------------------	--------------

2.	Department Use Only	
	State Tracking ID	

3.	Insurer Name & Address	Domicile	Insurer License Type	NAIC Group #	NAIC #	FEIN #	State #
	Metropolitan Life Insurance Company 200 Park Avenue New York, NY	NY		241	65978	13-5581829	

4.	Contact Name & Address	Telephone #	Fax #	E-mail Address
	Deborah Fountas Metropolitan Life Insurance Co. 1300 Hall Blvd. Bloomfield, CT 06602	(860) 656-3808	(860) 860-656-3815	dfountas@metlife.com

5.	Requested Filing Mode	<input type="checkbox"/> Review & Approval <input type="checkbox"/> File & Use <input checked="" type="checkbox"/> Informational <input type="checkbox"/> Combination (please explain): _____ <input type="checkbox"/> Other (please explain): _____
----	-----------------------	--

6.	Company Tracking Number	CT20-82
7.	<input checked="" type="checkbox"/> New Submission <input type="checkbox"/> Resubmission	Previous file # _____


8.	Market	<input type="checkbox"/> Individual <input type="checkbox"/> Franchise <input type="checkbox"/> Small <input checked="" type="checkbox"/> Large <input type="checkbox"/> Small and Large <input checked="" type="checkbox"/> Employer <input type="checkbox"/> Association <input type="checkbox"/> Blanket <input type="checkbox"/> Discretionary <input type="checkbox"/> Trust <input type="checkbox"/> Other: _____
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9.	Type of Insurance (TOI)	LTC03G – Group Long-Term Care Insurance
----	-------------------------	---

10.	Sub-Type of Insurance (Sub-TOI)	LTC03G.001 – Qualified
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11.	Submitted Documents	<input type="checkbox"/> <b>FORMS</b> <input type="checkbox"/> Policy <input type="checkbox"/> Outline of Coverage <input type="checkbox"/> Certificate <input type="checkbox"/> Application/Enrollment <input type="checkbox"/> Rider/Endorsement <input type="checkbox"/> Advertising <input type="checkbox"/> Schedule of Benefits <input type="checkbox"/> Other <b>Rates</b> <input type="checkbox"/> New Rate <input type="checkbox"/> Revised Rate <input type="checkbox"/> <b>FILING OTHER THAN FORM OR RATE:</b> Please explain: _____ <b>SUPPORTING DOCUMENTATION</b> <input type="checkbox"/> Articles of Incorporation <input type="checkbox"/> Third Party Authorization <input type="checkbox"/> Association Bylaws <input type="checkbox"/> Trust Agreements <input type="checkbox"/> Statement of Variability <input type="checkbox"/> Certifications <input type="checkbox"/> Actuarial Memorandum <input type="checkbox"/> Other _____
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12.	<b>Filing Submission Date</b>	<b>April 23, 2020</b>
13.	<b>Filing Fee (If required)</b>	Amount _____ Check Date _____ Retaliatory <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Check Number _____
14.	<b>Date of Domiciliary Approval</b>	<b>Not Applicable</b>
15.	<b>Filing Description:</b>	
	<p><b>This is a filing of a premium rate schedule increase for group long-term care insurance policies. Please see our filing letter for details.</b></p>	

16.	<b>Certification (If required)</b>
<p><b>I HEREBY CERTIFY</b> that I have reviewed the applicable filing requirements for this filing, and the filing complies with all applicable statutory and regulatory provisions for the state of <u>Pennsylvania</u>.</p>	
Print Name <u>Thomas G. Reilly</u> Title <u>Assistant Vice President</u>	
Signature <u></u> Date: <u>April 23, 2020</u>	

<b>17.</b>	<b>Form Filing Attachment</b>
<b>This filing transmittal is part of company tracking number</b>	<b>CT20-82</b>
<b>This filing corresponds to rate filing company tracking number</b>	<b>CT20-82</b>

	<b>Document Name</b>	<b>Form Number</b>		<b>Replaced Form Number</b>
	<b>Description</b>			<b>Previous State Filing Number</b>
01			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
02			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
03			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
04			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
05			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
06			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
07			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
08			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
09			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	
10			<input type="checkbox"/> Initial <input type="checkbox"/> Revised <input type="checkbox"/> Other _____	

LH FFA-1

<b>18.</b>	<b>Rate Filing Attachment</b>			
<b>This filing transmittal is part of company tracking number</b>			<b>CT20-82</b>	
<b>This filing corresponds to form filing company tracking number</b>			<b>CT20-82</b>	
<b>Overall percentage rate indication (when applicable)</b>			<b>6.82%</b>	
<b>Overall percentage rate impact for this filing</b>			<b>6.82%</b>	
	<b>Document Name</b>	<b>Affected Form Numbers</b>		<b>Previous State Filing Number</b>
	<b>Description</b>			
01	GPNP99-LTC, G.LTC6997		<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>6.82</u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
02			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
03			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
04			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
05			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
06			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
07			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
08			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
09			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	
10			<input type="checkbox"/> New <input type="checkbox"/> Revised Request + <u>    </u> % - <u>    </u> % <input type="checkbox"/> Other <u>                    </u>	

LH RFA-1

**Exhibit I-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**

	Calendar Year	Loss Ratio Demonstration									Factors Derived from Projected Values for Illustrative Purposes Only					Interest Rate Factors	
		Without Interest				With Interest				Premium Rate Increase Factor	Benefit Downgrade	Persistency Factors			Premium Persistency	Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio			Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency			
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%								4.47%	3.5378
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%								4.47%	3.4819
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%								4.47%	3.3328
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%								4.47%	3.1901
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%								4.47%	3.0534
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%								4.47%	2.9226
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%								4.47%	2.7975
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%								4.47%	2.6777
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%								4.47%	2.5630
	1998	43,940,449	7,714,265	17.6%	82,595	107,794,308	18,924,565	17.6%								4.47%	2.4532
	1999	48,097,051	19,863,200	41.5%	95,693	112,937,587	46,875,964	41.5%								4.47%	2.3481
	2000	55,598,283	26,952,514	29.7%	111,642	124,959,751	37,090,176	29.7%								4.47%	2.2475
	2001	66,614,492	24,068,185	36.1%	138,474	143,306,604	51,777,469	36.1%								4.47%	2.1513
	2002	76,962,588	25,845,554	33.6%	154,041	158,476,862	53,219,655	33.6%								4.47%	2.0591
	2003	84,734,429	28,607,127	33.8%	161,514	167,007,058	56,383,127	33.8%								4.47%	1.9709
	2004	93,549,570	29,417,980	31.4%	177,688	176,484,037	55,497,910	31.4%								4.47%	1.8865
	2005	106,389,491	35,602,802	33.5%	193,671	192,110,489	64,288,978	33.5%								4.47%	1.8057
	2006	121,561,825	36,875,172	30.3%	207,903	210,105,912	63,734,578	30.3%								4.47%	1.7284
	2007	132,858,561	46,491,291	35.0%	211,594	219,795,765	76,913,289	35.0%								4.47%	1.6544
	2008	138,403,077	54,716,840	39.5%	211,070	219,161,487	86,644,201	39.5%								4.47%	1.5835
	2009	141,341,445	50,240,716	35.5%	199,029	214,228,247	76,148,794	35.5%								4.47%	1.5157
Projected Future Experience	2010	141,989,582	48,415,921	34.1%	193,053	205,992,943	70,239,938	34.1%	1.4356	N/A	0.0098	N/A	0.990	0.956	4.47%	1.4508	
	2011	142,889,041	54,545,282	38.2%	187,553	198,419,139	75,742,883	38.2%	1.4356	N/A	0.0090	N/A	0.990	0.956	4.47%	1.3886	
	2012	142,013,255	62,091,189	43.7%	178,477	188,756,638	82,528,381	43.7%	1.4356	N/A	0.0092	N/A	0.991	0.954	4.47%	1.3291	
	2013	162,863,192	63,646,086	39.1%	170,629	207,197,738	80,971,795	39.1%	1.4356	N/A	0.0094	N/A	0.992	0.947	4.47%	1.2722	
	2014	189,092,342	70,214,415	37.1%	165,636	230,263,300	85,502,156	37.1%	1.4356	N/A	0.0090	N/A	0.991	0.952	4.47%	1.2177	
	2015	187,270,622	85,340,884	45.6%	160,865	218,277,590	99,471,046	45.6%	1.4356	N/A	0.0087	N/A	0.991	0.949	4.47%	1.1656	
	2016	187,556,911	95,493,013	50.9%	156,155	209,247,985	106,536,839	50.9%	1.4356	N/A	0.0086	N/A	0.991	0.947	4.47%	1.1157	
	2017	186,345,406	124,213,565	66.7%	151,817	198,992,000	132,643,494	66.7%	1.4356	N/A	0.0085	N/A	0.992	0.943	4.47%	1.0679	
	2018	180,833,741	140,540,754	77.7%	147,355	184,835,382	143,650,758	77.7%	1.4356	N/A	0.0084	N/A	0.992	0.938	4.47%	1.0221	
	2019	179,854,405	134,979,417	75.0%	145,563	175,960,601	132,057,145	75.0%	1.4356	N/A	0.0084	N/A	0.991	0.927	4.47%	0.9784	
	2020	172,545,082	144,912,977	84.0%	143,936	161,579,276	135,703,282	84.0%	1.4356	N/A	0.0083	N/A	0.991	0.927	4.47%	0.9364	
	2021	165,276,344	155,402,377	93.8%	141,622	148,143,460	138,970,368	93.8%	1.4356	N/A	0.0081	N/A	0.991	0.924	4.47%	0.8963	
	2022	158,038,299	165,545,413	104.8%	140,234	135,588,498	142,029,204	104.8%	1.4356	N/A	0.0080	N/A	0.991	0.924	4.47%	0.8579	
	2023	150,802,397	176,551,435	117.1%	138,939	123,839,007	144,984,131	117.1%	1.4356	N/A	0.0080	N/A	0.991	0.924	4.47%	0.8212	
	2024	143,533,323	188,099,230	131.0%	137,694	112,821,189	147,851,233	131.0%	1.4356	N/A	0.0080	N/A	0.991	0.952	4.47%	0.7860	
	2025	136,230,454	200,133,440	146.9%	136,495	102,494,568	150,572,724	146.9%	1.4356	N/A	0.0087	N/A	0.991	0.949	4.47%	0.7524	
	2026	128,953,454	212,548,270	164.8%	135,320	92,864,204	153,063,957	164.8%	1.4356	N/A	0.0086	N/A	0.991	0.947	4.47%	0.7201	
	2027	121,857,781	225,146,784	185.1%	134,175	83,857,897	155,192,177	185.1%	1.4356	N/A	0.0085	N/A	0.992	0.943	4.47%	0.6893	
	2028	114,394,123	237,971,315	208.0%	133,053	75,473,850	157,006,417	208.0%	1.4356	N/A	0.0084	N/A	0.992	0.940	4.47%	0.6598	
	2029	107,265,394	250,810,517	233.8%	131,949	67,739,368	158,389,815	233.8%	1.4356	N/A	0.0083	N/A	0.992	0.938	4.47%	0.6315	
	2030	100,216,491	263,449,743	262.9%	130,844	60,577,230	159,245,805	262.9%	1.4356	N/A	0.0084	N/A	0.992	0.934	4.47%	0.6045	
Past Future Lifetime	2031	93,279,467	275,730,380	295.6%	129,759	53,969,077	159,530,438	295.6%	1.4356	N/A	0.0083	N/A	0.992	0.931	4.47%	0.5786	
	2032	86,502,096	287,376,392	332.2%	128,634	47,904,276	159,147,104	332.2%	1.4356	N/A	0.0087	N/A	0.991	0.927	4.47%	0.5538	
	2033	79,874,951	298,176,293	373.3%	127,506	42,339,622	158,055,451	373.3%	1.4356	N/A	0.0088	N/A	0.991	0.923	4.47%	0.5301	
	2034	73,419,231	307,844,461	419.3%	126,339	37,250,741	156,191,152	419.3%	1.4356	N/A	0.0092	N/A	0.991	0.919	4.47%	0.5074	
	2035	67,195,282	315,998,872	470.3%	125,087	32,632,668	153,461,462	470.3%	1.4356	N/A	0.0099	N/A	0.990	0.915	4.47%	0.4856	
	2036	61,196,639	322,439,051	526.9%	123,802	28,446,582	149,882,231	526.9%	1.4356	N/A	0.0103	N/A	0.990	0.911	4.47%	0.4648	
	2037	55,446,846	327,292,319	590.3%	122,405	24,669,939	145,822,017	590.3%	1.4356	N/A	0.0113	N/A	0.989	0.908	4.47%	0.4449	
	2038	50,017,876	330,293,108	660.4%	120,940	21,301,255	140,662,864	660.4%	1.4356	N/A	0.0120	N/A	0.988	0.902	4.47%	0.4259	
	2039	44,896,939	331,044,062	737.3%	119,390	18,301,446	134,944,274	737.3%	1.4356	N/A	0.0128	N/A	0.987	0.898	4.47%	0.4076	
	2040	40,100,900	329,556,826	821.8%	117,631	15,646,294	128,584,223	821.8%	1.4356	N/A	0.0147	N/A	0.985	0.893	4.47%	0.3902	
	2041	35,638,286	326,050,406	914.9%	115,814	13,309,536	121,767,344	914.9%	1.4356	N/A	0.0155	N/A	0.985	0.889	4.47%	0.3735	
	2042	31,510,732	320,644,871	1017.6%	113,879	11,264,017	114,619,656	1017.6%	1.4356	N/A	0.0167	N/A	0.983	0.884	4.47%	0.3575	
	2043	27,717,481	313,388,572	1130.7%	111,825	9,483,688	107,227,622	1130.7%	1.4356	N/A	0.0180	N/A	0.982	0.880	4.47%	0.3422	
	2044	24,254,172	304,437,745	1255.2%	109,791	7,943,258	99,703,575	1255.2%	1.4356	N/A	0.0182	N/A	0.982	0.875	4.47%	0.3275	
	2045	21,112,367	293,941,395	1392.3%	107,616	6,618,169	92,142,862	1392.3%	1.4356	N/A	0.0198	N/A	0.980	0.870	4.47%	0.3135	
	2046	18,280,565	282,098,762	1543.2%	105,360	5,485,034	84,642,960	1543.2%	1.4356	N/A	0.0210	N/A	0.979	0.866	4.47%	0.3000	
	2047	15,743,943	269,053,633	1708.9%	103,045	4,521,597	77,271,126	1708.9%	1.4356	N/A	0.0220	N/A	0.978	0.861	4.47%	0.2872	
	2048	13,485,726	255,126,266	1891.8%	100,496	3,707,161	70,132,976	1891.8%	1.4356	N/A	0.0247	N/A	0.975	0.857	4.47%	0.2749	
	2049	11,488,614	240,446,363	2092.9%	97,813	3,022,898	63,266,531	2092.9%	1.4356	N/A	0.0267	N/A	0.973	0.852	4.47%	0.2631	
	2050	9,734,896	225,260,499	2313.9%	94,914	2,451,748	56,732,192	2313.9%	1.4356	N/A	0.0296	N/A	0.970	0.847	4.47%	0.2519	
	2051	8,204,526	209,824,719	2557.4%	91,821	1,977,820	50,581,289	2557.4%	1.4356	N/A	0.0326	N/A	0.967	0.843	4.47%	0.2411	
2052	6,877,171	194,286,488	2825.1%	88,307	1,586,835	44,829,568	2825.1%	1.4356	N/A	0.0383	N/A	0.962	0.838	4.47%	0.2307		
2053	5,732,558	178,809,370	3119.2%	84,247	1,266,074	39,491,255	3119.2%	1.4356	N/A	0.0460	N/A	0.954	0.834	4.47%	0.2209		
2054	4,752,635	163,626,550	3442.8%	80,209	1,004,694	34,590,207	3442.9%	1.4356	N/A	0.0479	N/A	0.952	0.829	4.47%	0.2114		
2055	3,919,684	148,845,570	3797.4%	76,200	793,12,1												

**Exhibit I-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 6.82% Future Increase**

	Calendar Year	Loss Ratio Demonstration										Factors Derived from Projected Values for Illustrative Purposes Only							Interest Rate Factors	
		Without Interest					With Interest					Premium		Persistence Factors			Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor		
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistence	Premium Persistence						
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%							4.47%	3.6378				
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%							4.47%	3.4819				
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%							4.47%	3.3328				
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%							4.47%	3.1901				
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%							4.47%	3.0534				
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%							4.47%	2.9226				
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%							4.47%	2.7975				
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%							4.47%	2.6777				
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%							4.47%	2.5630				
	1998	43,940,449	7,714,265	17.6%	82,595	107,794,308	18,924,565	17.6%							4.47%	2.4532				
	1999	49,097,051	19,863,200	41.5%	95,693	112,937,587	46,875,964	41.5%							4.47%	2.3481				
	2000	55,598,283	26,502,514	29.7%	111,642	124,959,751	37,090,176	29.7%							4.47%	2.2475				
	2001	66,614,492	24,068,185	36.1%	138,474	143,306,604	51,777,469	36.1%							4.47%	2.1513				
	2002	76,962,588	25,845,554	33.6%	154,041	158,476,862	53,219,655	33.6%							4.47%	2.0591				
	2003	84,734,429	28,607,127	33.8%	161,514	167,007,058	56,383,127	33.8%							4.47%	1.9709				
	2004	93,549,570	29,417,992	31.4%	177,688	176,484,037	55,497,910	31.4%							4.47%	1.8865				
	2005	106,389,491	35,602,802	33.5%	193,671	192,110,489	64,288,978	33.5%							4.47%	1.8057				
	2006	121,561,825	36,875,172	30.3%	207,903	210,105,912	63,734,578	30.3%							4.47%	1.7284				
	2007	132,858,561	46,491,291	35.0%	211,594	219,795,765	76,913,289	35.0%							4.47%	1.6544				
	2008	138,403,077	54,716,840	39.5%	211,070	219,161,487	86,644,201	39.5%							4.47%	1.5835				
	2009	141,341,445	50,240,716	35.5%	199,029	214,228,247	76,148,794	35.5%							4.47%	1.5157				
Projected Future Experience	2010	141,989,582	48,415,921	34.1%	193,053	205,992,943	70,239,938	34.1%							4.47%	1.4508				
	2011	142,889,041	54,545,282	38.2%	187,553	198,419,139	75,742,883	38.2%							4.47%	1.3886				
	2012	142,013,255	62,091,189	43.7%	178,477	188,756,638	82,528,381	43.7%							4.47%	1.3291				
	2013	162,863,192	63,646,086	39.1%	170,629	207,197,738	80,971,795	39.1%							4.47%	1.2722				
	2014	189,092,342	70,214,415	37.1%	165,636	230,263,300	85,502,156	37.1%							4.47%	1.2177				
	2015	187,270,622	85,340,894	45.6%	160,865	218,277,590	99,471,046	45.6%							4.47%	1.1656				
	2016	187,556,911	95,493,013	50.9%	156,155	209,247,985	106,536,839	50.9%							4.47%	1.1157				
	2017	186,345,406	124,213,565	66.7%	151,817	198,992,000	132,643,494	66.7%							4.47%	1.0679				
	2018	180,833,741	140,540,754	77.7%	147,355	184,835,382	143,650,758	77.7%	1.4356	1.00000	0.0122	1.0000	0.988	0.995	4.47%	1.0221				
	2019	179,854,405	134,979,417	75.0%	145,563	175,960,601	132,057,145	75.0%	1.4686	1.00000	0.0122	1.0000	0.988	0.995	4.47%	0.9784				
	2020	175,938,204	144,478,238	82.1%	143,504	164,756,754	135,296,172	82.1%	1.4353	1.00000	0.0141	0.9970	0.986	0.959	4.47%	0.9364				
	2021	175,488,901	154,112,123	87.8%	140,772	157,297,363	138,136,546	87.8%	1.5335	1.00000	0.0190	0.9940	0.981	0.958	4.47%	0.8963				
	2022	167,297,162	164,055,504	98.1%	138,972	143,532,113	140,750,942	98.1%	1.5335	1.00000	0.0128	0.9910	0.987	0.956	4.47%	0.8579				
	2023	159,637,336	174,962,472	109.6%	137,689	131,094,264	143,679,274	109.6%	1.5335	1.00000	0.0092	0.9910	0.991	0.954	4.47%	0.8212				
	2024	151,942,395	186,406,337	122.7%	136,455	119,430,954	146,520,572	122.7%	1.5335	1.00000	0.0090	0.9910	0.991	0.952	4.47%	0.7860				
	2025	144,211,678	198,323,239	137.5%	135,266	108,499,336	149,217,570	137.5%	1.5335	1.00000	0.0087	0.9910	0.991	0.949	4.47%	0.7524				
	2026	136,508,346	210,635,336	154.3%	134,103	98,384,765	151,686,382	154.3%	1.5335	1.00000	0.0086	0.9910	0.991	0.947	4.47%	0.7201				
	2027	128,785,248	223,120,463	173.3%	132,967	88,770,813	153,795,447	173.3%	1.5335	1.00000	0.0085	0.9910	0.992	0.943	4.47%	0.6893				
	2028	121,096,040	235,829,573	194.7%	131,855	79,895,576	155,593,359	194.7%	1.5335	1.00000	0.0084	0.9910	0.992	0.940	4.47%	0.6598				
	2029	113,549,666	248,553,222	218.9%	130,762	71,707,960	156,964,307	218.9%	1.5335	1.00000	0.0083	0.9910	0.992	0.938	4.47%	0.6315				
	2030	106,087,794	261,078,695	246.1%	129,666	64,126,220	157,812,593	246.1%	1.5335	1.00000	0.0084	0.9910	0.992	0.934	4.47%	0.6045				
2031	98,744,357	273,248,807	276.7%	128,591	57,130,921	158,094,664	276.7%	1.5335	1.00000	0.0083	0.9910	0.992	0.931	4.47%	0.5786					
2032	91,569,926	284,790,005	311.0%	127,476	50,710,895	157,714,789	311.0%	1.5335	1.00000	0.0088	0.9910	0.991	0.927	4.47%	0.5538					
2033	84,554,521	295,492,706	349.5%	126,359	44,820,139	156,632,952	349.5%	1.5335	1.00000	0.0098	0.9910	0.991	0.923	4.47%	0.5301					
2034	77,720,585	305,073,861	392.5%	125,202	39,433,120	154,785,431	392.5%	1.5335	1.00000	0.0092	0.9910	0.991	0.919	4.47%	0.5074					
2035	71,131,998	313,154,882	440.2%	123,961	34,544,492	152,080,309	440.2%	1.5335	1.00000	0.0099	0.9910	0.990	0.915	4.47%	0.4856					
2036	64,781,918	319,537,100	493.3%	122,687	30,113,159	148,533,290	493.3%	1.5335	1.00000	0.0103	0.9910	0.990	0.911	4.47%	0.4648					
2037	58,695,266	324,346,688	552.6%	121,303	26,115,257	144,311,419	552.6%	1.5335	1.00000	0.0113	0.9910	0.989	0.906	4.47%	0.4449					
2038	52,948,233	327,320,470	618.2%	119,852	22,549,214	139,396,898	618.2%	1.5335	1.00000	0.0120	0.9910	0.988	0.902	4.47%	0.4259					
2039	47,527,280	328,064,666	690.3%	118,316	19,373,658	133,729,775	690.3%	1.5335	1.00000	0.0128	0.9910	0.987	0.898	4.47%	0.4076					
2040	42,450,259	326,590,815	769.3%	116,573	16,562,951	127,426,965	769.3%	1.5335	1.00000	0.0147	0.9910	0.985	0.893	4.47%	0.3902					
2041	37,726,198	323,115,953	856.5%	114,771	14,089,291	120,671,438	856.5%	1.5335	1.00000	0.0155	0.9910	0.985	0.889	4.47%	0.3735					
2042	33,356,826	317,759,088	952.6%	112,854	11,923,933	113,588,079	952.6%	1.5335	1.00000	0.0167	0.9910	0.983	0.884	4.47%	0.3575					
2043	29,341,343	310,568,075	1058.5%	110,819	10,039,302	106,252,573	1058.5%	1.5335	1.00000	0.0180	0.9910	0.982	0.880	4.47%	0.3422					
2044	25,675,132	301,697,805	1175.1%	108,803	8,408,624	98,806,243	1175.1%	1.5335	1.00000	0.0190	0.9910	0.983	0.875	4.47%	0.3275					
2045	22,349,260	291,295,922	1303.4%	106,647	7,005,903	91,313,577	1303.4%	1.5335	1.00000	0.0198	0.9910	0.980	0.870	4.47%	0.3135					
2046	19,351,554	279,559,873	1444.6%	104,412	5,806,381	83,881,174	1444.6%	1.5335	1.00000	0.0210	0.9910	0.979	0.866	4.47%	0.3000					
2047	16,666,321	266,632,150	1599.8%	102,117	4,786,501	76,575,685	1599.8%	1.5335	1.00000	0.0220	0.9910	0.978	0.861	4.47%	0.2872					
2048	14,275,804	252,830,130	1771.0%	99,591	3,924,349	69,501,779	1771.0%	1.5335	1.00000	0.0247	0.9910	0.975	0.857	4.47%	0.2749					
2049	12,161,686	239,282,346	1959.3%	96,933	3,199,998	62,697,132	1959.3%	1.5335	1.00000	0.0267	0.9910	0.973	0.852	4.47%	0.2631					
2050	10,305,226	223,233,155	2166.2%	94,059	2,595,387	56,221,603	2166.2%	1.5335	1.00000	0.0296	0.9910	0.970	0.847	4.47%	0.2519					
2051	8,685,198	207,936,296	2394.1%	90,994	2,093,693	50,126,057	2394.1%	1.5335	1.00000	0.0326	0.9910	0.967	0.843	4.47%	0.2411					
2052	7,280,078	192,537,910	2644.7%	87,512	1,679,802	44,426,102	2644.7%	1.5335	1.00000	0.0383	0.9910	0.962	0.838	4.47%	0.2307					
2053	6,068,406	177,200,085	2920.0%	83,489	1,340,248	39,135,834	2920.0%	1.5335	1.00000	0.0460	0.9910	0.954	0.834	4.47%	0.2209					
2054	5,031,073	162,153,911	3223.0%	79,488	1,063,555	34,278,895	3223.0%	1.5335	1.00000	0.0479	0.9910	0.952	0.829	4.47%	0.2114					
2055	4,149,324	147,505,865																		

**Exhibit II-A**  
**Demonstration that Lifetime Incurred Claims with Requested Increase are**  
**Not Less than Lifetime Earned Premium with Prescribed Factors**

1	Accumulated value of initial earned premium	4,075,140,483	x	58%	=	2,363,581,480
2a	Accumulated value of earned premium	4,426,924,751				
2b	Accumulated value of prior premium rate schedule increases (2a-1)	351,784,268	x	85%	=	299,016,628
3	Present value of future projected initial earned premium	1,212,375,049	x	58%	=	703,177,529
4a	Present value of future projected premium	1,826,365,954				
4b	Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	613,990,905	x	85%	=	521,892,269
<b>5</b>	<b>Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b</b>					<b>3,887,667,906</b>
6a	Accumulated value of incurred claims without the inclusion of active life reserves					1,617,956,915
6b	Present value of future projected incurred claims without the inclusion of active life reserves					4,471,346,049
<b>7</b>	<b>Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b</b>					<b>6,089,302,964</b>
8	Test: 7 is not less than 5					TRUE

**Exhibit I-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases)**

	Calendar Year	Loss Ratio Demonstration							Factors Derived from Projected Values for Illustrative Purposes Only							Interest Rate Factors		
		Without Interest				With Interest			Premium		Persistency Factors			Calendar Year	Mid-Year			
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency			Premium Persistency	Effective In Rate	Disc / Accum Factor
Historical Experience	1989	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.6378
	1990	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.4819
	1991	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.3328
	1992	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.1901
	1993	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.0534
	1994	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.9226
	1995	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.7975
	1996	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.6777
	1997	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.5630
	1998	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.4532
	1999	71,094	-	0.0%	324	166,936	-	0.0%	-	-	-	-	-	-	-	-	4.47%	2.3481
	2000	467,489	1,025	0.2%	1,468	1,050,703	2,304	0.2%	-	-	-	-	-	-	-	-	4.47%	2.2475
	2001	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%	-	-	-	-	-	-	-	-	4.47%	2.1513
	2002	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%	-	-	-	-	-	-	-	-	4.47%	2.0591
	2003	1,727,834	102,414	5.9%	4,005	3,405,469	201,853	5.9%	-	-	-	-	-	-	-	-	4.47%	1.9709
	2004	2,659,254	510,600	19.2%	5,075	5,016,761	963,262	19.2%	-	-	-	-	-	-	-	-	4.47%	1.8865
	2005	5,407,385	1,025,526	19.0%	7,965	9,764,266	1,851,821	19.0%	-	-	-	-	-	-	-	-	4.47%	1.8057
	2006	8,054,419	1,721,859	21.4%	8,115	13,921,156	2,976,039	21.4%	-	-	-	-	-	-	-	-	4.47%	1.7284
	2007	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%	-	-	-	-	-	-	-	-	4.47%	1.6544
	2008	8,468,091	1,991,171	23.5%	8,660	13,409,236	3,153,022	23.5%	-	-	-	-	-	-	-	-	4.47%	1.5835
	2009	8,649,057	4,830,675	55.9%	8,358	13,109,193	7,321,752	55.9%	-	-	-	-	-	-	-	-	4.47%	1.5157
2010	8,397,807	1,575,434	18.8%	8,236	12,183,213	2,285,579	18.8%	-	-	-	-	-	-	-	-	4.47%	1.4508	
2011	8,220,240	22,879,657	22.9%	7,927	11,414,822	2,610,137	22.9%	-	-	-	-	-	-	-	-	4.47%	1.3886	
2012	7,831,661	2,996,055	38.3%	7,502	10,409,437	3,982,201	38.3%	-	-	-	-	-	-	-	-	4.47%	1.3291	
2013	8,670,849	2,599,794	30.0%	7,032	11,031,224	3,307,508	30.0%	-	-	-	-	-	-	-	-	4.47%	1.2722	
2014	9,869,254	3,042,819	30.8%	6,822	12,018,081	3,705,330	30.8%	-	-	-	-	-	-	-	-	4.47%	1.2177	
2015	9,562,284	2,306,183	24.1%	6,668	11,145,540	2,688,025	24.1%	-	-	-	-	-	-	-	-	4.47%	1.1656	
2016	9,351,568	3,319,052	35.5%	6,482	10,433,083	3,702,902	35.5%	-	-	-	-	-	-	-	-	4.47%	1.1157	
2017	9,183,735	4,147,150	45.2%	6,366	9,807,002	4,428,602	45.2%	-	-	-	-	-	-	-	-	4.47%	1.0679	
2018	8,834,882	3,140,941	35.6%	6,230	9,030,387	3,210,446	35.6%	-	-	-	-	-	-	-	-	4.47%	1.0221	
Projected Future Experience	2019	8,699,916	5,131,721	59.0%	6,149	8,511,564	5,020,620	59.0%	1.4356	N/A	0.0131	N/A	0.987	0.985	-	-	4.47%	0.9784
	2020	8,318,096	5,505,550	66.2%	6,075	7,789,454	5,155,654	66.2%	1.4356	N/A	0.0119	N/A	0.988	0.956	-	-	4.47%	0.9364
	2021	7,940,325	5,909,952	74.4%	5,973	7,117,215	5,297,315	74.4%	1.4356	N/A	0.0169	N/A	0.983	0.955	-	-	4.47%	0.8963
	2022	7,560,271	6,336,831	83.8%	5,911	6,486,312	5,436,665	83.8%	1.4356	N/A	0.0102	N/A	0.990	0.952	-	-	4.47%	0.8579
	2023	7,184,617	6,805,740	94.7%	5,855	5,900,012	5,588,877	94.7%	1.4356	N/A	0.0096	N/A	0.990	0.950	-	-	4.47%	0.8212
	2024	6,809,792	7,309,505	107.3%	5,800	5,352,686	5,745,474	107.3%	1.4356	N/A	0.0094	N/A	0.991	0.948	-	-	4.47%	0.7860
	2025	6,434,126	7,837,834	121.8%	5,747	4,840,789	5,896,886	121.8%	1.4356	N/A	0.0091	N/A	0.991	0.945	-	-	4.47%	0.7524
	2026	6,064,942	8,404,952	138.6%	5,696	4,367,591	6,052,720	138.6%	1.4356	N/A	0.0089	N/A	0.991	0.943	-	-	4.47%	0.7201
	2027	5,703,221	9,008,492	158.0%	5,646	3,931,192	6,209,484	158.0%	1.4356	N/A	0.0088	N/A	0.991	0.940	-	-	4.47%	0.6893
	2028	5,351,349	9,648,933	180.3%	5,597	3,530,662	6,366,080	180.3%	1.4356	N/A	0.0087	N/A	0.991	0.938	-	-	4.47%	0.6598
	2029	5,009,499	10,315,846	205.9%	5,549	3,163,558	6,514,579	205.9%	1.4356	N/A	0.0085	N/A	0.992	0.936	-	-	4.47%	0.6315
	2030	4,675,896	10,993,163	235.1%	5,499	2,826,409	6,644,968	235.1%	1.4356	N/A	0.0090	N/A	0.991	0.933	-	-	4.47%	0.6045
	2031	4,350,735	11,674,061	268.3%	5,452	2,517,222	6,754,309	268.3%	1.4356	N/A	0.0086	N/A	0.991	0.930	-	-	4.47%	0.5786
	2032	4,034,431	12,338,726	305.8%	5,401	2,234,240	6,833,103	305.8%	1.4356	N/A	0.0094	N/A	0.991	0.927	-	-	4.47%	0.5538
	2033	3,727,094	12,987,309	348.5%	5,356	1,975,635	6,884,233	348.5%	1.4356	N/A	0.0083	N/A	0.992	0.924	-	-	4.47%	0.5301
	2034	3,429,604	13,601,947	396.6%	5,300	1,740,079	6,901,224	396.6%	1.4356	N/A	0.0104	N/A	0.990	0.920	-	-	4.47%	0.5074
	2035	3,142,201	14,162,346	450.7%	5,247	1,525,976	6,877,791	450.7%	1.4356	N/A	0.0100	N/A	0.990	0.916	-	-	4.47%	0.4856
	2036	2,865,109	14,653,175	511.4%	5,195	1,331,814	6,811,366	511.4%	1.4356	N/A	0.0099	N/A	0.990	0.912	-	-	4.47%	0.4648
	2037	2,599,766	15,064,809	579.5%	5,142	1,156,713	6,702,778	579.5%	1.4356	N/A	0.0103	N/A	0.990	0.907	-	-	4.47%	0.4449
	2038	2,347,307	15,383,042	655.3%	5,086	999,654	6,551,220	655.3%	1.4356	N/A	0.0109	N/A	0.989	0.903	-	-	4.47%	0.4259
	2039	2,108,382	15,595,462	739.7%	5,028	859,445	6,357,215	739.7%	1.4356	N/A	0.0113	N/A	0.989	0.898	-	-	4.47%	0.4076
2040	1,883,918	15,681,511	832.4%	4,967	735,054	6,118,504	832.4%	1.4356	N/A	0.0121	N/A	0.988	0.894	-	-	4.47%	0.3902	
2041	1,674,421	15,654,992	934.9%	4,905	625,332	5,846,540	934.9%	1.4356	N/A	0.0125	N/A	0.987	0.889	-	-	4.47%	0.3735	
2042	1,480,171	15,521,331	1048.6%	4,841	529,111	5,548,349	1048.6%	1.4356	N/A	0.0130	N/A	0.987	0.884	-	-	4.47%	0.3575	
2043	1,301,194	15,280,357	1175.1%	4,769	445,211	5,231,680	1175.1%	1.4356	N/A	0.0149	N/A	0.985	0.879	-	-	4.47%	0.3422	
2044	1,137,420	14,855,059	1314.8%	4,702	372,506	4,897,792	1314.8%	1.4356	N/A	0.0140	N/A	0.986	0.874	-	-	4.47%	0.3275	
2045	988,775	14,521,770	1468.7%	4,628	309,955	4,552,191	1468.7%	1.4356	N/A	0.0159	N/A	0.984	0.869	-	-	4.47%	0.3135	
2046	854,733	13,990,430	1636.8%	4,559	256,460	4,197,790	1636.8%	1.4356	N/A	0.0149	N/A	0.985	0.864	-	-	4.47%	0.3000	
2047	734,726	13,353,717	1817.5%	4,487	211,010	3,835,134	1817.5%	1.4356	N/A	0.0158	N/A	0.984	0.860	-	-	4.47%	0.2872	
2048	628,120	12,687,704	2019.9%	4,401	172,667	3,487,788	2019.9%	1.4356	N/A	0.0191	N/A	0.981	0.855	-	-	4.47%	0.2749	
2049	533,968	11,963,054	2240.4%	4,296	140,488	3,147,733	2240.4%	1.4356	N/A	0.0238	N/A	0.976	0.850	-	-	4.47%	0.2631	
2050	451,426	11,210,924	2483.4%	4,183	113,692	2,823,488	2483.4%	1.4356	N/A	0.0265	N/A	0.973	0.845	-	-	4.47%	0.2519	
2051	379,516	10,435,872	2749.8%	4,068	91,488	2,515,718	2749.8%	1.4356	N/A	0.0273	N/A	0.973	0.841	-	-	4.47%	0.2411	
2052	317,283	9,659,574	3044.5%	3,939	73,210	2,228,845	3044.5%	1.4356	N/A	0.0318	N/A	0.968	0.836	-	-	4.47%	0.2307	
2053	263,772	8,889,437	3370.1%	3,798	58,256	1,963,292	3370.1%	1.4356	N/A	0.0359	N/A	0.964	0.831	-	-	4.47%	0.2209	
2054	218,080	8,123,088	3725.7%	3,649	46,091	1,717,199	3725.7%	1.4356	N/A	0.0393	N/A	0.961	0.827	-	-	4.47%	0.2114	
2055	179,235	7,372,068	4113.1%	3,502	36,267	1,491,686	4113.1%	1.4356	N/A	0.0402	N/A	0.960	0.822	-	-	4.47%	0.2023	
2056	146,523	6,644,566	4534.8%	3,323	28,378	1,286,896	4534.8%	1.4356	N/A	0.0511	N/A	0.949	0.817	-	-	4.47%	0.1937	
2057	119,099	5,949,066	4995.1%	3,099	22,079	1,102,845	4995.1%	1.4356	N/A	0.0672	N/A	0.933	0.813	-	-	4.47%	0.1854	
2058	96,221	5,296,428	5504.4%	2,844	17,074	930,804	5504.4%	1.4356	N/A	0.0825	N							

**Exhibit I-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases) and With 6.83% Future Increase**

	Calendar Year	Loss Ratio Demonstration							Factors Derived from Projected Values for Illustrative Purposes Only							Interest Rate Factors	
		Without Interest				With Interest			Premium		Persistence Factors		Policy Lapse & Mortality			Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Premium Persistence	Policy Shock Lapse	Policy Persistence	Premium Persistence			
Historical Experience	1989	-	-	-	N/A	-	-	-	N/A							4.47%	3.6378
	1990	-	-	-	N/A	-	-	-	N/A							4.47%	3.4819
	1991	-	-	-	N/A	-	-	-	N/A							4.47%	3.3328
	1992	-	-	-	N/A	-	-	-	N/A							4.47%	3.1901
	1993	-	-	-	N/A	-	-	-	N/A							4.47%	3.0534
	1994	-	-	-	N/A	-	-	-	N/A							4.47%	2.9226
	1995	-	-	-	N/A	-	-	-	N/A							4.47%	2.7975
	1996	-	-	-	N/A	-	-	-	N/A							4.47%	2.6777
	1997	-	-	-	N/A	-	-	-	N/A							4.47%	2.5630
	1998	-	-	-	N/A	-	-	-	N/A							4.47%	2.4532
	1999	71,094	-	0.0%	324	166,936	-	0.0%								4.47%	2.3481
	2000	467,703	1,025	0.2%	1,468	1,050,703	2,304	0.2%								4.47%	2.2475
	2001	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%								4.47%	2.1513
	2002	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%								4.47%	2.0591
	2003	1,727,834	102,414	5.9%	4,005	3,405,469	201,853	5.9%								4.47%	1.9709
	2004	2,659,254	510,600	19.2%	5,075	5,016,761	963,262	19.2%								4.47%	1.8865
	2005	5,407,385	1,026,265	19.0%	7,964	9,764,266	1,851,821	19.0%								4.47%	1.8057
	2006	8,054,419	1,721,859	21.4%	8,115	13,921,156	2,976,039	21.4%								4.47%	1.7284
	2007	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%								4.47%	1.6544
2008	8,468,091	1,991,171	23.5%	8,660	13,409,236	3,153,022	23.5%								4.47%	1.5835	
2009	8,649,057	4,830,675	55.9%	8,358	13,109,193	7,321,752	55.9%								4.47%	1.5157	
2010	8,397,807	1,575,434	18.8%	8,236	12,183,213	2,285,579	18.8%								4.47%	1.4508	
2011	8,220,240	1,879,657	22.9%	7,927	11,414,822	2,610,137	22.9%								4.47%	1.3886	
2012	7,831,661	2,996,055	38.3%	7,502	10,409,437	3,982,201	38.3%								4.47%	1.3291	
2013	8,670,849	2,599,794	30.0%	7,032	11,031,224	3,307,508	30.0%								4.47%	1.2722	
2014	9,869,254	3,042,819	30.8%	6,822	12,018,081	3,705,330	30.8%								4.47%	1.2177	
2015	9,562,284	2,306,183	24.1%	6,668	11,145,540	2,688,025	24.1%								4.47%	1.1656	
2016	9,351,568	3,319,052	35.5%	6,482	10,433,083	3,702,902	35.5%								4.47%	1.1157	
2017	9,183,735	4,147,150	45.2%	6,366	9,807,002	4,428,602	45.2%								4.47%	1.0679	
2018	8,834,882	3,140,941	35.6%	6,230	9,030,387	3,210,446	35.6%								4.47%	1.0221	
Projected Future Experience	2019	8,699,916	5,131,721	59.0%	6,149	8,511,564	5,020,620	59.0%	1.4356	1.00000		0.0131	1.0000	0.987	0.985	4.47%	0.9784
	2020	8,481,672	5,489,033	64.7%	6,057	7,942,634	5,140,187	64.7%	1.4683	1.00000		0.0149	0.9970	0.985	0.956	4.47%	0.9364
	2021	8,430,964	5,874,493	69.7%	5,937	7,556,963	5,265,531	69.7%	1.5335	1.00000		0.0198	0.9940	0.980	0.955	4.47%	0.8963
	2022	8,003,198	6,279,798	78.5%	5,858	6,866,321	5,387,735	78.5%	1.5335	1.00000		0.0132	0.9910	0.987	0.952	4.47%	0.8579
	2023	7,605,537	6,744,488	88.7%	5,802	6,245,671	5,538,577	88.7%	1.5335	1.00000		0.0096	0.9910	0.990	0.950	4.47%	0.8212
	2024	7,208,752	7,243,719	100.5%	5,747	5,666,280	5,693,765	100.5%	1.5335	1.00000		0.0094	0.9910	0.991	0.948	4.47%	0.7860
	2025	6,811,077	7,767,294	114.0%	5,695	5,124,393	5,843,814	114.0%	1.5335	1.00000		0.0091	0.9910	0.991	0.945	4.47%	0.7524
	2026	6,420,264	8,329,308	129.7%	5,644	4,623,472	5,998,246	129.7%	1.5335	1.00000		0.0089	0.9910	0.991	0.943	4.47%	0.7201
	2027	6,037,351	8,927,416	147.9%	5,595	4,161,506	6,153,606	147.9%	1.5335	1.00000		0.0088	0.9910	0.991	0.940	4.47%	0.6883
	2028	5,664,865	9,562,093	168.8%	5,546	3,737,510	6,308,785	168.8%	1.5335	1.00000		0.0087	0.9910	0.991	0.938	4.47%	0.6598
	2029	5,302,986	10,223,003	192.8%	5,499	3,348,899	6,455,948	192.8%	1.5335	1.00000		0.0085	0.9910	0.992	0.936	4.47%	0.6315
	2030	4,949,839	10,894,224	220.1%	5,450	2,991,998	6,585,163	220.1%	1.5335	1.00000		0.0090	0.9910	0.991	0.933	4.47%	0.6045
	2031	4,605,628	11,568,994	251.2%	5,403	2,664,697	6,693,520	251.2%	1.5335	1.00000		0.0086	0.9910	0.991	0.930	4.47%	0.5786
	2032	4,270,793	12,227,678	286.3%	5,352	2,365,136	6,771,605	286.3%	1.5335	1.00000		0.0094	0.9910	0.991	0.927	4.47%	0.5538
	2033	3,945,451	12,870,423	326.2%	5,308	2,091,380	6,822,274	326.2%	1.5335	1.00000		0.0083	0.9910	0.992	0.924	4.47%	0.5301
	2034	3,630,531	13,479,529	371.3%	5,253	1,842,024	6,839,113	371.3%	1.5335	1.00000		0.0104	0.9910	0.990	0.920	4.47%	0.5074
	2035	3,326,290	14,034,885	421.9%	5,200	1,615,377	6,815,891	421.9%	1.5335	1.00000		0.0100	0.9910	0.990	0.916	4.47%	0.4856
	2036	3,032,965	14,521,296	478.8%	5,149	1,409,840	6,750,064	478.8%	1.5335	1.00000		0.0099	0.9910	0.990	0.912	4.47%	0.4648
	2037	2,752,076	14,929,226	542.5%	5,096	1,224,480	6,642,453	542.5%	1.5335	1.00000		0.0103	0.9910	0.990	0.907	4.47%	0.4449
	2038	2,484,827	15,244,595	613.5%	5,040	1,058,220	6,492,259	613.5%	1.5335	1.00000		0.0109	0.9910	0.989	0.903	4.47%	0.4259
	2039	2,231,904	15,455,103	692.5%	4,983	909,796	6,300,000	692.5%	1.5335	1.00000		0.0113	0.9910	0.989	0.898	4.47%	0.4076
	2040	1,994,290	15,540,377	779.2%	4,923	778,118	6,063,438	779.2%	1.5335	1.00000		0.0121	0.9910	0.988	0.894	4.47%	0.3902
	2041	1,772,519	15,514,097	875.3%	4,861	661,968	5,793,921	875.3%	1.5335	1.00000		0.0125	0.9910	0.987	0.889	4.47%	0.3735
	2042	1,566,889	15,381,639	981.7%	4,798	560,110	5,498,414	981.7%	1.5335	1.00000		0.0130	0.9910	0.987	0.884	4.47%	0.3575
	2043	1,377,426	15,152,744	1100.1%	4,726	471,294	5,184,594	1100.1%	1.5335	1.00000		0.0149	0.9910	0.985	0.879	4.47%	0.3422
	2044	1,204,057	14,820,463	1230.9%	4,660	394,330	4,853,712	1230.9%	1.5335	1.00000		0.0140	0.9910	0.986	0.874	4.47%	0.3275
	2045	1,046,704	14,391,074	1374.9%	4,586	328,114	4,511,222	1374.9%	1.5335	1.00000		0.0159	0.9910	0.984	0.869	4.47%	0.3135
	2046	904,808	13,864,516	1532.3%	4,517	271,485	4,160,010	1532.3%	1.5335	1.00000		0.0149	0.9910	0.985	0.864	4.47%	0.3000
	2047	777,771	13,233,533	1701.5%	4,446	223,373	3,800,618	1701.5%	1.5335	1.00000		0.0158	0.9910	0.984	0.860	4.47%	0.2872
	2048	664,919	12,573,514	1891.0%	4,361	182,783	3,456,398	1891.0%	1.5335	1.00000		0.0191	0.9910	0.981	0.855	4.47%	0.2749
	2049	565,251	11,855,386	2097.4%	4,258	148,730	3,119,403	2097.4%	1.5335	1.00000		0.0238	0.9910	0.976	0.850	4.47%	0.2631
	2050	477,873	11,110,025	2324.9%	4,145	120,383	2,798,076	2324.9%	1.5335	1.00000		0.0265	0.9910	0.973	0.845	4.47%	0.2519
	2051	401,750	10,341,949	2574.2%	4,032	96,848	2,493,077	2574.2%	1.5335	1.00000		0.0273	0.9910	0.973	0.841	4.47%	0.2411
	2052	335,872	9,572,637	2850.1%	3,904	77,499	2,208,786	2850.1%	1.5335	1.00000		0.0318	0.9910	0.968	0.836	4.47%	0.2307
2053	279,226	8,809,432	3155.0%	3,764	61,669	1,945,623	3155.0%	1.5335	1.00000		0.0359	0.9910	0.964	0.831	4.47%	0.2209	
2054	230,803	8,049,980	3487.8%	3,616	48,791	1,701,744	3487.8%	1.5335	1.00000		0.0393	0.9910	0.961	0.827	4.47%	0.2114	
2055	189,736	7,305,719	3850.5%	3,470	38,392	1,478,261	3850.5%	1.5335	1.00000		0.0402	0.9910	0.960	0.822	4.47%	0.2023	
2056	155,108	6,584,765	4245.3%	3,293	30,041	1,275,314	4245.3%	1.5335	1.00000		0.0511	0.9910	0.949	0.817	4.47%	0.1937	
2057	126,076	5,895,524	4676.2%	3,072	23,372	1,092,919	4676.2%	1.5335	1.00000		0.0672	0.9910	0.933	0.813	4.47%	0.1854	
2058	101,859	5,248,760	5153.0%	2,818	18,074	931,346	5153.0%	1.5335	1.00000		0.0825	0.9910	0.918	0.808	4.47%	0.1774	
2059	81,770	4,636,186	5669.8%	2,588	13,88												

**Exhibit II-B**  
**Demonstration that Lifetime Incurred Claims with Requested Increase are**  
**Not Less than Lifetime Earned Premium with Prescribed Factors**

1	Accumulated value of initial earned premium	156,603,008	x	58%	=	90,829,744
2a	Accumulated value of earned premium	174,429,924				
2b	Accumulated value of prior premium rate schedule increases (2a-1)	17,826,917	x	85%	=	15,152,879
3	Present value of future projected initial earned premium	57,462,769	x	58%	=	33,328,406
4a	Present value of future projected premium	86,549,161				
4b	Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	29,086,392	x	85%	=	24,723,433
<b>5</b>	<b>Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b</b>					<b>164,034,463</b>
6a	Accumulated value of incurred claims without the inclusion of active life reserves					51,868,609
6b	Present value of future projected incurred claims without the inclusion of active life reserves					196,212,263
<b>7</b>	<b>Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b</b>					<b>248,080,872</b>
8	Test: 7 is not less than 5					TRUE

**Attachment 1**  
**Metropolitan Life Insurance Company**  
**Group Business Assumption Summary**

	Original Pricing Assumptions	Current Best Estimate Assumptions																																																																																																																														
Interest Rate:	6.00%	Maximum valuation interest rate for contract reserves, which average to 4.47%																																																																																																																														
Mortality:	1983 Group Annuity Mortality Table, adjusted to remove loading. These rates vary by age and sex.	97% of Annuity 2000 Basic table With Mortality Selection Factors of: <table><tr><td>Duration</td><td>Mortality Selection</td><td>Duration</td><td>Mortality Selection</td></tr><tr><td>1</td><td>55%</td><td>12</td><td>80%</td></tr><tr><td>2</td><td>65%</td><td>13</td><td>82%</td></tr><tr><td>3</td><td>70%</td><td>14</td><td>82%</td></tr><tr><td>4</td><td>71%</td><td>15</td><td>82%</td></tr><tr><td>5</td><td>76%</td><td>16</td><td>84%</td></tr><tr><td>6</td><td>77%</td><td>17</td><td>90%</td></tr><tr><td>7</td><td>78%</td><td>18</td><td>90%</td></tr><tr><td>8</td><td>78%</td><td>19</td><td>94%</td></tr><tr><td>9</td><td>80%</td><td>20+</td><td>100%</td></tr><tr><td>10</td><td>80%</td><td></td><td></td></tr><tr><td>11</td><td>80%</td><td></td><td></td></tr></table>	Duration	Mortality Selection	Duration	Mortality Selection	1	55%	12	80%	2	65%	13	82%	3	70%	14	82%	4	71%	15	82%	5	76%	16	84%	6	77%	17	90%	7	78%	18	90%	8	78%	19	94%	9	80%	20+	100%	10	80%			11	80%																																																																																
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Morbidity:	Details of morbidity assumptions used in original pricing is not available.  Incidence and continuance rates for nursing home based on the 1985 NNHS with modifications.	Current Group block experience with morbidity U/W Selection Factors of: <table><tr><td>Duration</td><td>U/W Selection</td></tr><tr><td>1</td><td>58%</td></tr><tr><td>2</td><td>59%</td></tr><tr><td>3</td><td>83%</td></tr><tr><td>4+</td><td>100%</td></tr></table>	Duration	U/W Selection	1	58%	2	59%	3	83%	4+	100%																																																																																																																				
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Incidence:	Incidence and continuance rates for nursing home based on the 1985 NNHS with modifications.	Sample Ultimate Smoothed Incidence Rates (before gross-up to zero-day elimination) <table><tr><td rowspan="2">Attained Age</td><td colspan="2">Male</td><td colspan="2">Female</td></tr><tr><td>Facility Care</td><td>Home Care</td><td>Facility Care</td><td>Home Care</td></tr><tr><td>81</td><td>1.84%</td><td>1.18%</td><td>2.04%</td><td>1.18%</td></tr><tr><td>82</td><td>1.95%</td><td>1.35%</td><td>2.41%</td><td>1.36%</td></tr><tr><td>83</td><td>2.29%</td><td>1.53%</td><td>2.81%</td><td>1.55%</td></tr><tr><td>84</td><td>2.66%</td><td>1.71%</td><td>3.24%</td><td>1.76%</td></tr><tr><td>85</td><td>3.06%</td><td>1.91%</td><td>3.69%</td><td>1.97%</td></tr></table> <p>Change Minor refinements to the Home Care incidence assumptions.</p>	Attained Age	Male		Female		Facility Care	Home Care	Facility Care	Home Care	81	1.84%	1.18%	2.04%	1.18%	82	1.95%	1.35%	2.41%	1.36%	83	2.29%	1.53%	2.81%	1.55%	84	2.66%	1.71%	3.24%	1.76%	85	3.06%	1.91%	3.69%	1.97%																																																																																												
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Continuance:	Incidence and continuance rates for nursing home based on the 1985 NNHS with modifications.	Continuance curves were constructed in 2016 by gender and care path separately for deaths and recoveries. Coefficients to an exponential shaped curve were based on experience adjusted to minimize differences between actual and expected terminations in total as well as at periodic duration points along the curves.  Death and recovery termination rates are recombined into a single termination table for modeling and valuation uses.  In 2019, there were some minor refinements to the coefficients of the curves																																																																																																																														
Utilization:	Home care prevalence rates were based on 1982-1984 National Long Term Care Surveys with modifications.	<table><tr><td>Home Care</td><td>Facility Care</td></tr><tr><td>60%</td><td>71%</td></tr></table>	Home Care	Facility Care	60%	71%																																																																																																																										
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**Attachment 2**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**  
**Actual to Expected Ratios**

	Calendar Year	Actual / Projected Experience			Expected Pricing Experience			G = C / F Actual to Expected Ratio	Accumulative Loss Ratio as of 12/31/2018		
		A Earned Premium	B Incurred Claims	C = B / A Loss Ratio	D Earned Premium	E Incurred Claims	F = E / D Loss Ratio		H Actual/Projected at 4.47% (on C)	I Expected at 6% (on F)	J = H / I Actual to Expected Ratio
Historical Experience	1989	73,088	0	0.0%	73,088	4,029	5.5%	0.00	0.0%	5.5%	0.00
	1990	3,257,050	98,323	3.0%	5,311,180	329,177	6.2%	0.49	2.9%	6.2%	0.48
	1991	8,385,510	142,014	1.7%	10,112,966	918,674	9.1%	0.19	2.1%	8.0%	0.26
	1992	13,462,425	1,315,222	9.8%	13,627,176	1,676,420	12.3%	0.79	6.1%	9.9%	0.61
	1993	24,542,532	1,901,925	7.7%	25,811,872	3,080,002	11.9%	0.65	6.9%	10.8%	0.63
	1994	29,207,461	2,508,403	8.6%	26,445,658	4,619,335	17.5%	0.49	7.5%	12.8%	0.58
	1995	32,821,623	3,484,114	10.6%	29,571,488	6,322,772	21.4%	0.50	8.3%	14.9%	0.56
	1996	36,225,167	6,221,356	17.2%	32,843,385	8,233,368	25.1%	0.69	10.3%	16.9%	0.61
	1997	41,731,413	3,361,627	8.1%	33,261,076	10,127,920	30.4%	0.26	9.9%	19.1%	0.52
	1998	43,940,449	7,714,265	17.6%	34,779,640	12,278,468	35.3%	0.50	11.2%	21.3%	0.52
	1999	48,097,051	19,963,200	41.5%	41,736,097	14,437,295	34.6%	1.20	15.7%	23.1%	0.68
	2000	55,598,283	16,502,514	29.7%	50,139,603	17,016,701	33.9%	0.87	17.6%	24.6%	0.72
	2001	66,614,492	24,068,185	36.1%	59,764,759	20,224,778	33.8%	1.07	20.2%	25.8%	0.79
	2002	76,962,588	25,845,554	33.6%	68,464,473	23,682,297	34.6%	0.97	22.0%	26.8%	0.82
	2003	84,734,429	28,607,127	33.8%	71,644,385	27,261,769	38.1%	0.89	23.5%	28.1%	0.84
	2004	93,549,570	29,417,990	31.4%	80,593,438	31,638,773	39.3%	0.80	24.4%	29.2%	0.83
	2005	106,389,491	35,602,802	33.5%	90,340,254	36,495,479	40.4%	0.83	25.4%	30.3%	0.84
	2006	121,561,825	36,875,172	30.3%	97,421,952	41,629,933	42.7%	0.71	25.9%	31.4%	0.82
	2007	132,858,561	46,491,291	35.0%	99,561,785	46,874,251	47.1%	0.74	26.9%	32.7%	0.82
	2008	138,403,077	54,716,840	39.5%	97,738,095	51,557,726	52.8%	0.75	28.0%	34.1%	0.82
Projected Experience	2009	141,341,445	50,240,716	35.5%	94,966,334	56,121,390	59.1%	0.60	28.7%	35.6%	0.81
	2010	141,989,562	48,415,921	34.1%	89,718,036	60,515,268	67.5%	0.51	29.1%	37.2%	0.78
	2011	142,889,041	54,545,282	38.2%	84,687,280	64,203,430	75.8%	0.50	29.7%	38.9%	0.76
	2012	142,013,255	62,091,189	43.7%	78,799,915	67,286,746	85.4%	0.51	30.5%	40.6%	0.75
	2013	162,863,192	63,646,086	39.1%	72,902,140	69,986,365	96.0%	0.41	31.0%	42.3%	0.73
	2014	189,092,342	70,214,415	37.1%	67,021,906	72,070,083	107.5%	0.35	31.4%	44.0%	0.71
	2015	187,270,622	85,340,894	45.6%	61,486,908	73,734,116	119.9%	0.38	32.2%	45.6%	0.71
	2016	187,556,911	95,493,013	50.9%	56,284,154	74,959,172	133.2%	0.38	33.2%	47.3%	0.70
	2017	186,345,406	124,213,565	66.7%	51,403,340	75,737,804	147.3%	0.45	34.8%	48.9%	0.71
	2018	180,833,741	140,540,754	77.7%	46,831,534	76,222,538	162.8%	0.48	36.5%	50.4%	0.73
	2019	179,854,405	134,979,417	75.0%	42,566,892	76,568,884	179.9%	0.42	38.0%	51.9%	0.73
	2020	172,545,082	144,912,977	84.0%	38,597,616	76,481,363	198.2%	0.42	39.6%	53.3%	0.74
	2021	165,276,344	155,042,377	93.8%	34,917,259	76,113,387	218.0%	0.43	41.2%	54.6%	0.75
	2022	158,038,299	165,545,413	104.8%	31,514,459	75,633,225	240.0%	0.44	42.9%	55.9%	0.77
	2023	150,802,397	176,551,435	117.1%	28,376,448	74,799,329	263.6%	0.44	44.7%	57.1%	0.78
	2024	143,533,323	188,099,230	131.0%	25,497,232	73,764,894	289.3%	0.45	46.5%	58.3%	0.80
	2025	136,230,454	200,133,440	146.9%	22,860,210	72,677,748	317.9%	0.46	48.4%	59.3%	0.82
	2026	128,953,454	212,548,270	164.8%	20,451,240	71,363,566	348.9%	0.47	50.4%	60.3%	0.84
	2027	121,657,781	225,146,784	185.1%	18,263,677	69,988,949	383.3%	0.48	52.5%	61.3%	0.86
	2028	114,394,123	237,971,315	208.0%	16,275,994	68,686,931	422.0%	0.49	54.5%	62.2%	0.88
	2029	107,265,394	250,810,517	233.8%	14,480,974	67,257,280	464.5%	0.50	56.7%	63.0%	0.90
	2030	100,216,491	263,449,743	262.9%	12,860,337	65,791,146	511.6%	0.51	58.8%	63.8%	0.92
	2031	93,279,467	275,730,380	295.6%	11,398,924	64,372,349	564.7%	0.52	61.0%	64.5%	0.95
	2032	86,502,095	287,376,392	332.2%	10,086,638	62,866,128	623.3%	0.53	63.2%	65.2%	0.97
	2033	79,874,951	298,176,293	373.3%	8,912,477	61,330,583	688.1%	0.54	65.5%	65.8%	1.00
	2034	73,419,231	307,844,461	419.3%	7,860,976	59,816,976	760.9%	0.55	67.7%	66.4%	1.02
	2035	67,195,282	315,998,872	470.3%	6,922,734	58,196,726	840.7%	0.56	69.9%	66.9%	1.04
	2036	61,196,639	322,439,051	526.9%	6,083,148	56,549,556	929.6%	0.57	72.0%	67.4%	1.07
	2037	55,446,846	327,292,319	590.3%	5,332,277	54,940,188	1030.3%	0.57	74.1%	67.8%	1.09
	2038	50,017,876	330,293,108	660.4%	4,667,427	53,277,041	1141.5%	0.58	76.2%	68.3%	1.12
	2039	44,896,939	331,044,062	737.3%	4,075,550	51,578,188	1265.6%	0.58	78.2%	68.6%	1.14
	2040	40,100,900	329,556,826	821.8%	3,549,036	49,775,407	1402.5%	0.59	80.1%	69.0%	1.16
	2041	35,638,286	326,050,406	914.9%	3,084,069	47,831,245	1550.9%	0.59	81.9%	69.3%	1.18
	2042	31,510,732	320,644,871	1017.6%	2,670,023	45,833,972	1716.6%	0.59	83.7%	69.6%	1.20
	2043	27,717,481	313,388,572	1130.7%	2,305,719	43,613,334	1891.5%	0.60	85.3%	69.9%	1.22
	2044	24,254,172	304,437,745	1255.2%	1,986,011	41,420,050	2085.6%	0.60	86.8%	70.1%	1.24
	2045	21,112,367	293,941,395	1392.3%	1,705,128	39,208,006	2299.4%	0.61	88.2%	70.3%	1.25
	2046	18,280,565	282,098,762	1543.2%	1,458,304	36,985,383	2536.2%	0.61	89.5%	70.5%	1.27
	2047	15,743,943	269,053,633	1708.9%	1,243,293	34,815,193	2800.2%	0.61	90.7%	70.7%	1.28
	2048	13,485,726	255,126,266	1891.8%	1,055,463	32,676,900	3096.0%	0.61	91.8%	70.8%	1.30
	2049	11,488,614	240,446,363	2092.9%	893,288	30,443,218	3408.0%	0.61	92.8%	70.9%	1.31
	2050	9,734,896	225,260,499	2313.9%	754,026	28,108,556	3727.8%	0.62	93.6%	71.1%	1.32
	2051	8,204,526	209,824,719	2557.4%	632,787	25,682,760	4058.7%	0.63	94.4%	71.2%	1.33
	2052	6,877,171	194,286,488	2825.1%	529,093	23,227,989	4390.2%	0.64	95.1%	71.2%	1.34
	2053	5,732,558	178,809,370	3119.2%	440,783	20,881,279	4737.3%	0.66	95.8%	71.3%	1.34
	2054	4,752,635	163,626,550	3442.9%	366,143	18,505,384	5054.1%	0.68	96.3%	71.4%	1.35
	2055	3,919,684	148,845,570	3797.4%	303,067	16,111,346	5316.1%	0.71	96.8%	71.4%	1.36
	2056	3,215,464	134,596,659	4185.9%	249,979	13,781,442	5513.0%	0.76	97.2%	71.5%	1.36
	2057	2,623,337	121,019,745	4613.2%	206,006	11,629,508	5645.2%	0.82	97.5%	71.5%	1.36
	2058	2,128,280	108,244,637	5086.0%	169,243	9,724,792	5746.0%	0.89	97.9%	71.5%	1.37
	2059	1,717,112	96,256,777	5605.7%	139,041	8,056,167	5794.1%	0.97	98.1%	71.5%	1.37
	2060	1,377,916	85,101,342	6176.1%	114,085	6,644,538	5824.2%	1.06	98.3%	71.5%	1.37
Past		2,820,611,603	1,139,579,759	40.4%	1,673,343,917	1,049,246,078	62.7%	0.64	36.5%	50.4%	0.73
Future		2,580,213,236	9,752,003,051	378.0%	395,857,078	1,977,020,907	499.4%	0.76	255.5%	354.3%	0.72
Lifetime		5,400,824,840	10,891,582,810	201.7%	2,069,200,995	3,026,266,985	146.3%	1.38	98.3%	72.0%	1.37

Note:

- Figures in column A are normalized to reflect the prior rate action authorized by Pennsylvania rather than the prior rate action approved by other states.
- Figures in column D do not reflect any rate action.

**Attachment 3**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**  
**Actual to Expected Ratios**

Duration	Actual / Projected Experience			Expected Pricing Experience			G = C / F Actual to Expected Ratio
	Actual Experience through 12/31/2018 Projections based on Current Assumptions			Reproduced based on Original Pricing Assumptions since inception			
	A	B	C = B / A	D	E	F = E / D	
	Earned Premium	Incurred Claims	Loss Ratio	Earned Premium	Incurred Claims	Loss Ratio	
1	109,211,753	17,639,534	16.2%	103,097,706	5,683,649	5.5%	2.93
2	181,678,373	14,382,125	7.9%	171,360,628	20,953,104	12.2%	0.65
3	170,882,694	15,882,104	9.3%	158,818,285	28,457,066	17.9%	0.52
4	163,705,671	23,305,970	14.2%	147,274,304	35,627,975	24.2%	0.59
5	160,290,888	26,156,859	16.3%	136,457,042	43,500,661	31.9%	0.51
6	157,360,455	23,593,986	15.0%	126,336,500	55,541,985	44.0%	0.34
7	156,477,923	36,645,895	23.4%	116,680,376	60,824,280	52.1%	0.45
8	156,867,413	42,113,822	26.8%	107,509,122	63,561,205	59.1%	0.45
9	157,794,086	45,202,572	28.6%	99,008,523	67,919,789	68.6%	0.42
10	159,567,433	53,264,503	33.4%	90,970,313	70,420,795	77.4%	0.43
11	161,695,775	56,698,806	35.1%	83,439,578	71,649,125	85.9%	0.41
12	161,997,432	63,046,407	38.9%	76,299,034	75,342,317	98.7%	0.39
13	165,248,246	66,026,003	40.0%	69,560,477	77,221,731	111.0%	0.36
14	169,290,967	76,932,429	45.4%	63,251,299	78,053,325	123.4%	0.37
15	168,977,528	89,744,611	53.1%	57,325,991	80,677,569	140.7%	0.38
16	169,379,855	95,717,826	56.5%	51,839,802	81,105,167	156.5%	0.36
17	169,746,557	103,406,948	60.9%	46,766,568	80,994,286	173.2%	0.35
18	167,350,685	119,461,483	71.4%	42,035,652	82,285,425	195.8%	0.36
19	163,786,016	128,747,533	78.6%	37,732,817	81,805,767	216.8%	0.36
20	160,239,239	141,913,336	88.6%	33,753,616	80,282,014	237.8%	0.37
21	156,003,646	148,269,439	95.0%	30,148,995	79,683,011	264.3%	0.36
22	149,962,425	166,345,133	110.9%	26,853,682	77,836,956	289.9%	0.38
23	144,601,897	186,091,257	128.7%	23,859,317	75,429,536	316.1%	0.41
24	139,789,000	202,977,087	145.2%	21,174,388	74,653,590	352.6%	0.41
25	133,764,106	222,286,112	166.2%	18,765,584	72,901,932	388.5%	0.43
26	127,547,612	238,860,835	187.3%	16,577,171	70,617,790	426.0%	0.44
27	122,195,123	255,762,253	209.3%	14,633,500	70,080,798	478.9%	0.44
28	115,121,544	273,253,441	237.4%	12,876,654	68,650,989	533.1%	0.45
29	107,961,511	284,373,998	263.4%	11,360,426	66,964,157	589.5%	0.45
30	101,081,248	299,296,023	296.1%	10,003,331	66,209,907	661.9%	0.45
31	93,548,473	312,182,920	333.7%	8,770,661	64,163,546	731.6%	0.46
32	86,200,346	323,342,482	375.1%	7,682,739	62,012,506	807.2%	0.46
33	79,087,269	332,769,559	420.8%	6,710,210	60,871,075	907.1%	0.46
34	72,245,318	340,232,788	470.9%	5,843,295	59,040,309	1010.4%	0.47
35	65,682,964	345,565,285	526.1%	5,132,022	57,121,977	1113.1%	0.47
36	59,447,254	348,801,899	586.7%	4,439,674	55,785,198	1256.5%	0.47
37	53,544,305	349,763,990	653.2%	3,851,267	54,210,767	1407.6%	0.46
38	48,009,336	348,442,547	725.8%	3,315,743	52,540,110	1584.6%	0.46
39	42,850,047	344,826,229	804.7%	2,856,766	51,489,229	1802.4%	0.45
40	38,062,491	339,094,029	890.9%	2,457,829	49,851,407	2028.3%	0.44
41	33,662,794	331,524,081	984.8%	2,104,301	47,702,035	2266.9%	0.43
42	29,631,844	322,270,826	1087.6%	1,784,894	46,115,027	2583.6%	0.42
43	25,960,341	311,424,215	1199.6%	1,518,520	44,122,427	2905.6%	0.41
44	22,635,140	299,254,981	1322.1%	1,281,959	42,035,137	3279.0%	0.40
45	19,643,598	286,111,008	1456.5%	1,077,682	40,263,559	3736.1%	0.39
46	16,975,688	272,074,400	1602.7%	915,457	38,122,461	4164.3%	0.38
47	14,603,361	257,432,040	1762.8%	765,311	36,058,859	4711.7%	0.37
48	12,504,126	242,395,142	1938.5%	613,955	34,206,922	5571.6%	0.35
49	10,657,679	227,100,357	2130.9%	522,180	32,218,925	6170.1%	0.35
50	9,040,639	211,707,433	2341.7%	425,690	30,126,161	7077.0%	0.33
51	7,631,139	196,361,436	2573.2%	347,029	24,559,341	7077.0%	0.36
52	6,408,978	181,098,364	2825.7%	282,904	20,021,177	7077.0%	0.40
53	5,354,605	166,083,684	3101.7%	230,628	16,321,592	7077.0%	0.44
54	4,449,415	151,416,829	3403.1%	188,012	13,305,630	7077.0%	0.48
55	3,676,384	137,244,981	3733.2%	153,270	10,846,968	7077.0%	0.53
56	3,019,621	123,697,388	4096.5%	124,948	8,842,626	7077.0%	0.58
57	2,464,568	110,820,245	4496.5%	101,860	7,208,654	7077.0%	0.64
58	1,998,273	98,618,739	4935.2%	83,038	5,876,613	7077.0%	0.70
59	1,608,944	87,149,882	5416.6%	67,694	4,790,711	7077.0%	0.77
60	1,285,921	76,477,457	5947.3%	55,185	3,905,466	7077.0%	0.84
Lifetime	5,401,467,961	10,992,683,544	203.5%	2,069,475,403	3,038,672,312	146.8%	1.39
Lifetime*	2,698,909,305	2,647,391,991	98.1%	1,240,235,183	905,044,099	73.0%	1.34

Note:

- Figures in column A are normalized to reflect the prior rate action authorized by Pennsylvania rather than the prior rate action approved by other states.

- Figures in column D do not reflect any rate action.

\* Columns A and B are discounted back to the inception date at an interest rate of 4.47%, which is the weighted average maximum valuation interest rate for contract reserves. Columns D and E are discounted back to the inception date at the original pricing interest rate of 6%.

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual-to-Expected Results - Lapse**  
**Group Business**

<b>Lapse</b>			
<b>Policy Duration</b>	<b>Actual</b>	<b>Expected <sup>1,2</sup></b>	<b>A/E%</b>
1	23,387	31,077	75.3%
2	21,027	21,607	97.3%
3	16,139	17,791	90.7%
4	13,722	12,884	106.5%
5	11,258	10,788	104.4%
6	8,879	7,609	116.7%
7	7,345	7,207	101.9%
8	6,891	5,146	133.9%
9	5,229	4,768	109.7%
10	5,790	4,516	128.2%
11	4,505	3,336	135.0%
12	3,105	3,087	100.6%
13+	11,400	9,048	126.0%

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual-to-Expected Results - Mortality**  
**Group Business**

<b>Mortality</b>			
<b>Policy Duration</b>	<b>Actual</b>	<b>Expected <sup>1</sup></b>	<b>A/E%</b>
1	791	764	103.58%
2	966	934	103.44%
3	1,097	1,050	104.48%
4	1,160	1,110	104.49%
5	1,296	1,241	104.47%
6	1,318	1,315	100.21%
7	1,449	1,396	103.83%
8	1,391	1,329	104.63%
9	1,462	1,401	104.36%
10	1,442	1,450	99.45%
11	1,510	1,458	103.56%
12	1,493	1,447	103.18%
13	1,506	1,446	104.17%
14	1,433	1,381	103.77%
15	1,424	1,378	103.31%
16	1,454	1,391	104.52%
17	1,462	1,401	104.33%
18	1,327	1,276	103.99%
19	1,270	1,223	103.83%
20+	7,326	7,034	104.15%

<sup>1</sup> The expecteds are based on current best estimate assumptions.

<sup>2</sup> Experience based on most recent five years only. The majority of the remaining policies are in their 13<sup>th</sup> duration or later, as a result, the results for duration 12 and before are no longer relevant.

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual to Expected Incidence**  
**Group Business**

Attained Age	Female						Male					
	Facility Care			Home Care			Facility Care			Home Care		
	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	A/E%
under 50	18	64	28%	48	60	79%	24	50	48%	69	49	141%
50 to 54	27	70	39%	74	66	111%	24	56	43%	63	56	113%
55 to 59	48	113	42%	124	107	116%	43	93	46%	93	93	100%
60 to 64	115	153	75%	142	140	102%	113	134	85%	142	132	108%
65 to 69	237	201	118%	210	153	137%	203	171	118%	171	156	110%
70 to 74	495	466	106%	270	239	113%	375	356	105%	289	244	118%
75 to 79	984	960	103%	379	367	103%	682	686	99%	347	334	104%
80 to 84	1,441	1,420	101%	439	441	99%	933	956	98%	330	347	95%
85 to 89	1,210	1,198	101%	308	342	90%	758	759	100%	222	232	95%
over 89	520	523	100%	140	148	94%	326	305	107%	93	105	89%
<b>Total</b>	<b>5,095</b>	<b>5,168</b>	<b>99%</b>	<b>2,134</b>	<b>2,065</b>	<b>103%</b>	<b>3,481</b>	<b>3,565</b>	<b>98%</b>	<b>1,819</b>	<b>1,748</b>	<b>104%</b>

<sup>1</sup> Based on actual experience through 6/30/2018.

<sup>2</sup> The expected claims are based on current best estimate assumptions.

**Attachment 4**  
**Metropolitan Life Insurance Company**  
**Actual to Expected Claim Termination**  
**All Business (exclude AARP-Pru)**

<b>Claim Duration (Months)</b>	<b>Actual Deaths</b>	<b>Expected Deaths<sup>1</sup></b>	<b>Actual Recoveries</b>	<b>Expected Recoveries<sup>1</sup></b>	<b>Deaths A/E%</b>	<b>Recoveries A/E%</b>	<b>Total A/E%</b>
1	970	678	69	107	143%	64%	132%
2	850	1,334	180	257	64%	70%	65%
3	891	1,224	251	254	73%	99%	77%
4	1,019	1,394	336	294	73%	114%	80%
5	1,036	1,191	312	246	87%	127%	94%
6	885	1,001	228	201	88%	113%	93%
7	799	844	203	168	95%	121%	99%
8	722	734	151	139	98%	108%	100%
9	668	649	126	117	103%	108%	104%
10	618	588	124	100	105%	124%	108%
11	553	544	98	87	102%	112%	103%
12	616	512	94	77	120%	122%	121%
13	500	483	89	69	103%	129%	107%
14+	15,204	13,659	1,350	1,476	111%	91%	109%
<b>Total</b>	<b>25,331</b>	<b>24,835</b>	<b>3,611</b>	<b>3,594</b>	<b>102%</b>	<b>100%</b>	<b>102%</b>

<sup>1</sup> The expected deaths and recoveries are based on current best estimate assumptions.

**Attachment 9-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases)**

	Calendar Year	Loss Ratio Demonstration						Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors		
		Without Interest			Life Years	With Interest		Premium Rate Increase Factor	Benefit Downgrade	Persistency Factors				Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor	
		Earned Premium	Paid Claims	Loss Ratio		Earned Premium	Paid Claims			Loss Ratio	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency			Premium Persistency
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%						4.47%	3.6378	
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%						4.47%	3.4819	
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%						4.47%	3.3328	
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%						4.47%	3.1901	
	1993	24,542,532	1,801,925	7.7%	57,383	74,938,870	5,807,393	7.7%						4.47%	3.0534	
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%						4.47%	2.9226	
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%						4.47%	2.7975	
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%						4.47%	2.6777	
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%						4.47%	2.5630	
	1998	43,940,449	7,400,663	16.8%	82,595	107,794,308	18,155,238	16.8%						4.47%	2.4532	
	1999	48,097,051	19,903,012	41.4%	95,693	112,937,587	46,734,635	41.4%						4.47%	2.3481	
	2000	55,598,283	15,341,470	27.6%	111,642	124,959,751	34,480,673	27.6%						4.47%	2.2475	
	2001	66,614,492	23,296,986	35.0%	138,474	143,306,604	50,118,403	35.0%						4.47%	2.1513	
	2002	76,962,588	25,824,880	33.6%	154,041	158,476,862	53,177,083	33.6%						4.47%	2.0591	
	2003	84,734,429	27,262,857	32.2%	161,514	167,007,058	53,733,643	32.2%						4.47%	1.9709	
	2004	93,549,570	29,011,708	31.0%	177,688	176,484,037	54,731,448	31.0%						4.47%	1.8865	
	2005	106,389,491	33,953,523	31.9%	193,671	192,110,489	61,310,830	31.9%						4.47%	1.8057	
	2006	121,561,825	35,342,958	29.1%	207,903	210,105,912	61,086,319	29.1%						4.47%	1.7284	
	2007	132,858,561	45,028,895	33.9%	211,594	219,795,765	74,493,961	33.9%						4.47%	1.6544	
	2008	138,403,077	51,819,969	37.4%	211,070	219,161,487	82,057,002	37.4%						4.47%	1.5835	
2009	141,341,445	48,299,312	34.2%	199,029	214,228,247	73,206,249	34.2%						4.47%	1.5157		
2010	141,989,582	46,028,904	32.4%	193,053	205,992,943	66,776,946	32.4%						4.47%	1.4508		
2011	142,889,041	50,689,248	35.5%	187,553	198,419,139	70,388,302	35.5%						4.47%	1.3886		
2012	142,013,255	54,145,282	38.1%	178,477	188,756,638	71,967,095	38.1%						4.47%	1.3291		
2013	162,863,192	53,843,020	33.1%	170,629	207,197,738	68,500,143	33.1%						4.47%	1.2722		
2014	189,092,342	51,316,061	27.1%	165,636	230,263,300	62,489,075	27.1%						4.47%	1.2177		
2015	187,270,622	56,233,400	30.0%	160,865	218,277,590	65,544,136	30.0%						4.47%	1.1656		
2016	187,556,911	41,787,092	22.3%	156,155	209,247,985	46,597,482	22.3%						4.47%	1.1157		
2017	186,345,406	29,221,373	15.7%	151,817	198,992,000	31,204,523	15.7%						4.47%	1.0679		
2018	180,833,741	9,109,991	5.0%	147,355	184,835,382	9,311,585	5.0%						4.47%	1.0221		
Projected Future Experience	2019	179,854,405	24,293,532	13.5%	145,563	175,960,601	23,767,583	13.5%	1.4356	N/A	0.0122	N/A	0.988	0.995	4.47%	0.9784
	2020	172,545,082	57,644,053	33.4%	143,936	161,579,276	53,980,584	33.4%	1.4356	N/A	0.0112	N/A	0.989	0.959	4.47%	0.9364
	2021	165,276,344	96,938,230	52.6%	141,622	148,143,460	77,926,035	52.6%	1.4356	N/A	0.0161	N/A	0.984	0.958	4.47%	0.8963
	2022	158,038,299	113,293,590	71.7%	140,234	135,588,498	97,199,905	71.7%	1.4356	N/A	0.0098	N/A	0.992	0.940	4.47%	0.8579
	2023	150,802,397	137,185,204	91.0%	138,939	123,839,007	112,656,562	91.0%	1.4356	N/A	0.0092	N/A	0.991	0.954	4.47%	0.8212
	2024	143,533,323	157,784,204	109.9%	137,694	112,821,189	124,022,779	109.9%	1.4356	N/A	0.0090	N/A	0.991	0.952	4.47%	0.7860
	2025	136,230,454	176,926,266	129.9%	136,495	102,494,568	133,112,537	129.9%	1.4356	N/A	0.0087	N/A	0.991	0.949	4.47%	0.7524
	2026	128,953,454	193,843,117	150.3%	135,320	92,864,204	139,593,677	150.3%	1.4356	N/A	0.0086	N/A	0.991	0.947	4.47%	0.7201
	2027	121,657,781	208,944,963	171.7%	134,175	83,857,867	144,024,370	171.7%	1.4356	N/A	0.0080	N/A	0.992	0.943	4.47%	0.6893
	2028	114,394,123	223,793,695	195.6%	133,053	75,473,850	147,652,444	195.6%	1.4356	N/A	0.0084	N/A	0.992	0.940	4.47%	0.6598
	2029	107,265,394	238,765,975	222.6%	131,949	67,739,368	150,783,544	222.6%	1.4356	N/A	0.0083	N/A	0.992	0.938	4.47%	0.6315
	2030	100,216,491	253,497,459	252.9%	130,844	60,577,230	153,230,011	252.9%	1.4356	N/A	0.0084	N/A	0.992	0.934	4.47%	0.6045
	2031	93,279,467	267,944,279	287.2%	129,759	53,969,077	155,025,602	287.2%	1.4356	N/A	0.0083	N/A	0.992	0.931	4.47%	0.5786
	2032	86,502,095	282,225,448	326.3%	128,634	47,904,276	156,294,546	326.3%	1.4356	N/A	0.0087	N/A	0.991	0.927	4.47%	0.5538
	2033	79,874,951	296,180,678	370.8%	127,506	42,339,622	156,997,628	370.8%	1.4356	N/A	0.0088	N/A	0.991	0.923	4.47%	0.5301
	2034	73,419,231	309,601,398	421.7%	126,339	37,250,741	157,082,569	421.7%	1.4356	N/A	0.0092	N/A	0.991	0.919	4.47%	0.5074
	2035	67,195,282	322,211,759	479.5%	125,087	32,632,668	156,478,684	479.5%	1.4356	N/A	0.0099	N/A	0.990	0.915	4.47%	0.4856
	2036	61,196,639	333,744,148	545.4%	123,802	28,446,582	155,137,280	545.4%	1.4356	N/A	0.0103	N/A	0.990	0.911	4.47%	0.4648
	2037	55,446,846	343,951,281	620.3%	122,405	24,669,939	153,034,081	620.3%	1.4356	N/A	0.0113	N/A	0.989	0.906	4.47%	0.4449
	2038	50,017,876	352,675,806	705.1%	120,940	21,301,255	150,195,047	705.1%	1.4356	N/A	0.0120	N/A	0.988	0.902	4.47%	0.4259
2039	44,896,939	359,656,863	801.1%	119,390	18,301,446	146,607,778	801.1%	1.4356	N/A	0.0128	N/A	0.987	0.898	4.47%	0.4076	
2040	40,100,900	364,632,420	909.3%	117,631	15,646,294	142,269,778	909.3%	1.4356	N/A	0.0147	N/A	0.985	0.893	4.47%	0.3902	
2041	35,638,286	367,458,774	1031.1%	115,814	13,309,536	137,231,784	1031.1%	1.4356	N/A	0.0155	N/A	0.985	0.889	4.47%	0.3735	
2042	31,510,732	368,086,745	1168.1%	113,879	11,264,017	131,578,515	1168.1%	1.4356	N/A	0.0167	N/A	0.983	0.884	4.47%	0.3575	
2043	27,717,491	366,508,073	1322.3%	111,825	9,483,688	125,402,751	1322.3%	1.4356	N/A	0.0180	N/A	0.982	0.880	4.47%	0.3422	
2044	24,254,172	362,748,004	1495.6%	109,791	7,943,258	118,800,226	1495.6%	1.4356	N/A	0.0182	N/A	0.982	0.875	4.47%	0.3275	
2045	21,112,367	356,878,451	1690.4%	107,616	6,618,169	111,871,967	1690.4%	1.4356	N/A	0.0198	N/A	0.980	0.870	4.47%	0.3135	
2046	18,280,565	349,007,122	1909.2%	105,360	5,485,034	104,718,630	1909.2%	1.4356	N/A	0.0210	N/A	0.979	0.866	4.47%	0.3000	
2047	15,743,943	339,277,027	2155.0%	103,045	4,521,597	97,439,003	2155.0%	1.4356	N/A	0.0220	N/A	0.978	0.861	4.47%	0.2872	
2048	13,485,726	327,849,647	2431.1%	100,496	3,707,161	90,124,281	2431.1%	1.4356	N/A	0.0247	N/A	0.975	0.857	4.47%	0.2749	
2049	11,488,614	314,932,504	2741.3%	97,813	3,022,898	82,865,412	2741.3%	1.4356	N/A	0.0267	N/A	0.973	0.852	4.47%	0.2631	
2050	9,734,896	300,743,924	3089.3%	94,914	2,451,748	75,742,805	3089.3%	1.4356	N/A	0.0296	N/A	0.970	0.847	4.47%	0.2519	
2051	8,204,526	285,525,304	3480.1%	91,821	1,977,820	68,830,011	3480.1%	1.4356	N/A	0.0326	N/A	0.967	0.843	4.47%	0.2411	
2052	6,877,171	269,497,216	3918.7%	88,307	1,586,835	62,183,654	3918.7%	1.4356	N/A	0.0383	N/A	0.962	0.838	4.47%	0.2307	
2053	5,732,558	252,857,020	4410.9%	84,247	1,266,074	55,845,178	4410.9%	1.4356	N/A	0.0460	N/A	0.954	0.834	4.47%	0.2209	
2054	4,752,635	235,893,695	4963.2%	80,209	1,004,694	49,865,170	4963.2%	1.4356	N/A	0.0479	N/A	0.952	0.829	4.47%	0.2114	
2055	3,919,684	218,833,970	5582.9%	76,200	793,120	44,279,513	5582.9%	1.4356	N/A	0.0500	N/A	0.950	0.825	4.47%	0.2023	
2056	3,215,464	201,847,084	6277.4%	72,062	622,760	39,093,027	6277.4%	1.4356	N/A	0.0543	N/A	0.946	0.820	4.47%	0.1937	
2057	2,623,337	185,015,637	7052.7%	66,330	468,127	34,298,048	7052.7%	1.4356	N/A	0.0754	N/A	0.925	0.816	4.47%	0.1854	
2058	2,128,280	168,606,622	7922.2%	61,561	377,622											

**Attachment 9-A**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 6.82% Future Increase**

	Calendar Year	Loss Ratio Demonstration						Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors		
		Without Interest			Life Years	With Interest		Premium Rate Increase Factor	Benefit Downgrade	Persistence Factors				Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor	
		Earned Premium	Paid Claims	Loss Ratio		Earned Premium	Paid Claims			Loss Ratio	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency			Premium Persistency
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%						4.47%	3.6378	
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%						4.47%	3.4819	
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%						4.47%	3.3328	
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%						4.47%	3.1901	
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%						4.47%	3.0534	
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%						4.47%	2.9226	
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%						4.47%	2.7975	
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%						4.47%	2.6777	
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%						4.47%	2.5630	
	1998	43,940,449	7,400,663	16.8%	82,595	107,794,308	18,155,238	16.8%						4.47%	2.4532	
	1999	49,097,051	19,903,012	41.4%	95,693	112,937,587	46,734,635	41.4%						4.47%	2.3481	
	2000	55,598,283	15,341,470	27.6%	111,642	124,959,751	34,480,673	27.6%						4.47%	2.2475	
	2001	66,614,492	23,296,986	35.0%	138,474	143,306,604	50,118,403	35.0%						4.47%	2.1513	
	2002	76,962,588	25,824,880	33.6%	154,041	158,476,862	53,177,083	33.6%						4.47%	2.0591	
	2003	84,734,429	27,262,857	32.2%	161,514	167,007,058	53,733,643	32.2%						4.47%	1.9709	
	2004	93,549,570	29,011,708	31.0%	177,688	176,484,037	54,731,448	31.0%						4.47%	1.8865	
	2005	106,389,491	33,953,523	31.9%	193,671	192,110,489	61,310,830	31.9%						4.47%	1.8057	
	2006	121,561,825	35,342,958	29.1%	207,903	210,105,912	61,086,319	29.1%						4.47%	1.7284	
	2007	132,858,561	45,028,895	33.9%	211,594	219,795,765	74,493,961	33.9%						4.47%	1.6544	
	2008	138,403,077	51,819,969	37.4%	211,070	219,161,487	82,057,002	37.4%						4.47%	1.5835	
	2009	141,341,445	48,299,312	34.2%	199,029	214,228,247	73,206,249	34.2%						4.47%	1.5157	
2010	141,989,582	46,028,904	32.4%	193,053	205,992,943	66,776,946	32.4%						4.47%	1.4508		
2011	142,889,041	50,689,248	35.5%	187,553	198,419,139	70,388,302	35.5%						4.47%	1.3886		
2012	142,013,255	54,145,282	38.1%	178,477	188,756,638	71,967,095	38.1%						4.47%	1.3291		
2013	162,863,192	53,843,020	33.1%	170,629	207,197,738	68,500,143	33.1%						4.47%	1.2722		
2014	189,092,342	51,316,061	27.1%	165,636	230,263,300	62,489,075	27.1%						4.47%	1.2177		
2015	187,270,622	56,233,400	30.0%	160,865	218,277,590	65,544,136	30.0%						4.47%	1.1656		
2016	187,556,911	41,787,092	22.3%	156,155	209,247,985	46,597,482	22.3%						4.47%	1.1157		
2017	186,345,406	29,221,373	15.7%	151,817	198,992,000	31,204,523	15.7%						4.47%	1.0679		
2018	180,833,741	9,109,991	5.0%	147,355	184,835,382	9,311,585	5.0%						4.47%	1.0221		
Projected Future Experience	2019	179,854,405	24,293,532	13.5%	145,563	175,960,601	23,767,583	13.5%	1.4356	1.00000	0.0122	1.0000	0.988	0.995	4.47%	0.9784
	2020	175,938,204	57,471,121	32.7%	143,504	164,756,754	53,818,643	32.7%	1.4683	1.00000	0.0141	0.9970	0.986	0.959	4.47%	0.9364
	2021	175,498,901	96,416,601	49.2%	140,772	157,297,363	77,458,479	49.2%	1.5335	1.00000	0.0190	0.9940	0.981	0.958	4.47%	0.8963
	2022	167,297,162	112,273,948	67.1%	138,972	143,532,113	96,325,106	67.1%	1.5335	1.00000	0.0128	0.9910	0.987	0.956	4.47%	0.8579
	2023	159,637,336	135,950,538	85.2%	137,689	131,094,264	111,642,653	85.2%	1.5335	1.00000	0.0092	0.9910	0.991	0.954	4.47%	0.8212
	2024	151,942,395	156,364,147	102.9%	136,455	119,430,954	122,906,574	102.9%	1.5335	1.00000	0.0090	0.9910	0.991	0.952	4.47%	0.7860
	2025	144,211,678	175,333,930	121.6%	135,266	108,499,336	131,914,524	121.6%	1.5335	1.00000	0.0087	0.9910	0.991	0.949	4.47%	0.7524
	2026	136,508,346	192,098,529	140.7%	134,103	98,384,765	138,337,334	140.7%	1.5335	1.00000	0.0086	0.9910	0.991	0.947	4.47%	0.7201
	2027	128,785,248	207,084,458	160.8%	132,967	88,770,813	142,728,151	160.8%	1.5335	1.00000	0.0085	0.9910	0.992	0.943	4.47%	0.6893
	2028	121,096,040	221,779,552	183.1%	131,855	79,895,576	146,323,572	183.1%	1.5335	1.00000	0.0084	0.9910	0.992	0.940	4.47%	0.6598
	2029	113,549,666	236,617,082	208.4%	130,762	71,707,960	149,426,492	208.4%	1.5335	1.00000	0.0083	0.9910	0.992	0.938	4.47%	0.6315
	2030	106,087,794	251,215,982	236.8%	129,666	64,126,220	151,850,941	236.8%	1.5335	1.00000	0.0084	0.9910	0.992	0.934	4.47%	0.6045
	2031	98,744,357	265,532,780	268.9%	128,591	57,130,921	153,830,372	268.9%	1.5335	1.00000	0.0083	0.9910	0.992	0.931	4.47%	0.5786
	2032	91,589,926	279,685,416	305.4%	127,476	50,710,805	154,887,895	305.4%	1.5335	1.00000	0.0087	0.9910	0.991	0.927	4.47%	0.5538
	2033	84,554,521	293,515,052	347.1%	126,359	44,820,139	155,584,649	347.1%	1.5335	1.00000	0.0088	0.9910	0.991	0.923	4.47%	0.5301
	2034	77,720,585	306,814,986	394.8%	125,202	39,433,120	155,668,826	394.8%	1.5335	1.00000	0.0092	0.9910	0.991	0.919	4.47%	0.5074
	2035	71,131,998	319,311,853	448.9%	123,961	34,544,492	155,070,375	448.9%	1.5335	1.00000	0.0099	0.9910	0.990	0.915	4.47%	0.4856
	2036	64,781,918	330,740,450	510.5%	122,687	30,113,159	153,741,044	510.5%	1.5335	1.00000	0.0103	0.9910	0.990	0.911	4.47%	0.4648
	2037	58,695,266	340,695,719	580.7%	121,303	26,115,257	151,656,774	580.7%	1.5335	1.00000	0.0113	0.9910	0.989	0.906	4.47%	0.4449
	2038	52,948,233	349,501,724	660.1%	119,852	22,549,214	148,843,292	660.1%	1.5335	1.00000	0.0120	0.9910	0.988	0.902	4.47%	0.4259
	2039	47,527,280	356,419,951	749.9%	118,316	19,373,658	145,288,308	749.9%	1.5335	1.00000	0.0128	0.9910	0.987	0.898	4.47%	0.4076
2040	42,450,259	361,350,728	851.2%	116,573	16,562,951	140,989,350	851.2%	1.5335	1.00000	0.0147	0.9910	0.985	0.893	4.47%	0.3902	
2041	37,726,198	364,151,645	965.2%	114,771	14,089,291	135,996,698	965.2%	1.5335	1.00000	0.0155	0.9910	0.985	0.889	4.47%	0.3735	
2042	33,356,826	364,773,964	1093.6%	112,854	11,923,933	130,394,309	1093.6%	1.5335	1.00000	0.0167	0.9910	0.983	0.884	4.47%	0.3575	
2043	29,341,343	363,208,500	1237.9%	110,819	10,039,302	124,274,126	1237.9%	1.5335	1.00000	0.0180	0.9910	0.982	0.880	4.47%	0.3422	
2044	25,675,132	359,483,272	1400.1%	108,803	8,408,624	117,731,024	1400.1%	1.5335	1.00000	0.0182	0.9910	0.982	0.875	4.47%	0.3275	
2045	22,349,260	353,666,545	1582.5%	106,647	7,005,903	110,865,119	1582.5%	1.5335	1.00000	0.0198	0.9910	0.980	0.870	4.47%	0.3135	
2046	19,351,554	345,866,058	1787.3%	104,412	5,806,381	103,776,163	1787.3%	1.5335	1.00000	0.0210	0.9910	0.979	0.866	4.47%	0.3000	
2047	16,666,321	336,223,534	2017.4%	102,117	4,786,501	96,562,052	2017.4%	1.5335	1.00000	0.0220	0.9910	0.978	0.861	4.47%	0.2872	
2048	14,275,804	324,899,000	2275.9%	99,591	3,924,349	89,313,163	2275.9%	1.5335	1.00000	0.0247	0.9910	0.975	0.857	4.47%	0.2749	
2049	12,161,688	312,098,111	2566.2%	96,933	3,199,998	82,119,623	2566.2%	1.5335	1.00000	0.0267	0.9910	0.973	0.852	4.47%	0.2631	
2050	10,305,226	298,037,229	2892.1%	94,059	2,595,387	75,061,120	2892.1%	1.5335	1.00000	0.0296	0.9910	0.970	0.847	4.47%	0.2519	
2051	8,685,198	282,955,577	3257.9%	90,994	2,093,693	68,210,541	3257.9%	1.5335	1.00000	0.0326	0.9910	0.967	0.843	4.47%	0.2411	
2052	7,280,078	267,071,741	3668.5%	87,512	1,679,802	61,624,001	3668.5%	1.5335	1.00000	0.0383	0.9910	0.962	0.838	4.47%	0.2307	
2053	6,068,406	250,581,306	4129.3%	83,489	1,340,248	55,342,572	4129.3%	1.5335	1.00000	0.0460	0.9910	0.954	0.834	4.47%	0.2209	
2054	5,031,073	233,760,742	4646.3%	79,488	1,063,555	49,416,384	4646.3%	1.5335	1.00000	0.0479	0.9910	0.952	0.829	4.47%	0.2114	
2055	4,148,324	216,984,464	5226.5%	75,514	839,586	43,980,938	5226.5%	1.5335	1.00000	0.0500	0.9910	0.950	0.825	4.47%	0.2020	
2056	3,403,848	20														

**Attachment 9-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases)**

	Calendar Year	Loss Ratio Demonstration								Factors Derived from Projected Values for Illustrative Purposes Only						Interest Rate Factors	
		Without Interest				With Interest				Premium		Benefit		Persistence Factors		Calendar Year Effective In Rate	Mid-Year Disc / Accum Fac
		Earned Premium	Paid Claims	Loss Ratio	Life Years	Earned Premium	Paid Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency			
Historical Experience	1989	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	3.6378
	1990	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	3.4819
	1991	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	3.3328
	1992	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	3.1901
	1993	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	3.0534
	1994	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	2.9226
	1995	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	2.7975
	1996	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	2.6777
	1997	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	2.5630
	1998	-	-	-	N/A	-	-	-	N/A	-	-	-	-	-	-	4.47%	2.4532
	1999	71,094	-	0.0%	324	166,936	-	0.0%	-	-	-	-	-	-	-	4.47%	2.3481
	2000	467,489	1,025	0.2%	1,468	1,050,703	2,304	0.2%	-	-	-	-	-	-	-	4.47%	2.2475
	2001	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%	-	-	-	-	-	-	-	4.47%	2.1513
	2002	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%	-	-	-	-	-	-	-	4.47%	2.0591
	2003	1,727,834	2,902	0.2%	4,005	3,405,469	5,719	0.2%	-	-	-	-	-	-	-	4.47%	1.9709
	2004	2,659,254	143,895	15.6%	5,075	5,016,761	780,825	15.6%	-	-	-	-	-	-	-	4.47%	1.8865
	2005	5,407,385	1,025,526	19.0%	7,965	9,764,266	1,851,821	19.0%	-	-	-	-	-	-	-	4.47%	1.8057
	2006	8,054,419	1,721,859	21.4%	8,115	13,921,156	2,976,039	21.4%	-	-	-	-	-	-	-	4.47%	1.7284
	2007	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%	-	-	-	-	-	-	-	4.47%	1.6544
	2008	8,468,091	1,872,343	22.1%	8,660	13,409,236	2,964,859	22.1%	-	-	-	-	-	-	-	4.47%	1.5835
	2009	8,649,057	4,714,177	54.5%	8,358	13,109,193	7,145,178	54.5%	-	-	-	-	-	-	-	4.47%	1.5157
2010	8,397,807	1,169,764	13.9%	8,236	12,183,213	1,697,048	13.9%	-	-	-	-	-	-	-	4.47%	1.4508	
2011	8,220,240	1,801,122	21.9%	7,927	11,414,822	2,501,081	21.9%	-	-	-	-	-	-	-	4.47%	1.3886	
2012	7,831,661	2,558,397	32.7%	7,502	10,409,437	3,400,489	32.7%	-	-	-	-	-	-	-	4.47%	1.3291	
2013	8,670,849	2,354,141	27.2%	7,032	11,031,224	2,994,984	27.2%	-	-	-	-	-	-	-	4.47%	1.2722	
2014	9,869,254	2,352,917	23.8%	6,822	12,018,081	2,865,216	23.8%	-	-	-	-	-	-	-	4.47%	1.2177	
2015	9,562,284	1,489,056	15.6%	6,668	11,145,540	1,735,603	15.6%	-	-	-	-	-	-	-	4.47%	1.1656	
2016	9,351,568	1,527,965	16.3%	6,482	10,433,083	1,704,675	16.3%	-	-	-	-	-	-	-	4.47%	1.1157	
2017	9,183,735	969,322	10.6%	6,366	9,807,002	1,035,107	10.6%	-	-	-	-	-	-	-	4.47%	1.0679	
2018	8,834,882	144,949	1.6%	6,230	9,030,387	148,157	1.6%	-	-	-	-	-	-	-	4.47%	1.0221	
Projected Future Experience	2019	8,699,916	723,877	8.3%	6,149	8,511,564	708,205	8.3%	1.4356	N/A	0.0131	N/A	0.987	0.985	4.47%	0.9784	
	2020	8,318,096	2,040,694	24.5%	6,075	7,789,454	1,911,001	24.5%	1.4356	N/A	0.0119	N/A	0.988	0.956	4.47%	0.9364	
	2021	7,940,325	3,194,049	40.2%	5,973	7,117,215	2,862,948	40.2%	1.4356	N/A	0.0169	N/A	0.983	0.955	4.47%	0.8963	
	2022	7,560,271	4,239,169	56.1%	5,911	6,486,312	3,636,982	56.1%	1.4356	N/A	0.0102	N/A	0.990	0.952	4.47%	0.8579	
	2023	7,184,617	5,027,317	72.4%	5,855	5,900,215	4,272,146	72.4%	1.4356	N/A	0.0096	N/A	0.990	0.950	4.47%	0.8212	
	2024	6,809,792	6,070,439	89.1%	5,800	5,352,686	4,771,534	89.1%	1.4356	N/A	0.0094	N/A	0.991	0.948	4.47%	0.7860	
	2025	6,434,126	6,889,135	107.1%	5,747	4,840,789	5,183,121	107.1%	1.4356	N/A	0.0091	N/A	0.991	0.945	4.47%	0.7524	
	2026	6,064,942	7,614,784	125.6%	5,696	4,367,591	5,483,691	125.6%	1.4356	N/A	0.0089	N/A	0.991	0.943	4.47%	0.7201	
	2027	5,703,221	8,274,901	145.1%	5,646	3,931,192	5,703,834	145.1%	1.4356	N/A	0.0088	N/A	0.991	0.940	4.47%	0.6893	
	2028	5,351,349	8,945,921	167.2%	5,597	3,530,662	5,902,254	167.2%	1.4356	N/A	0.0087	N/A	0.991	0.938	4.47%	0.6598	
	2029	5,009,499	9,641,402	192.5%	5,549	3,163,558	6,088,660	192.5%	1.4356	N/A	0.0085	N/A	0.992	0.936	4.47%	0.6315	
	2030	4,675,896	10,340,940	221.2%	5,499	2,826,409	6,250,723	221.2%	1.4356	N/A	0.0090	N/A	0.991	0.933	4.47%	0.6045	
	2031	4,350,735	11,046,549	253.9%	5,452	2,517,222	6,391,246	253.9%	1.4356	N/A	0.0086	N/A	0.991	0.930	4.47%	0.5786	
	2032	4,034,431	11,771,134	291.8%	5,401	2,234,240	6,518,774	291.8%	1.4356	N/A	0.0094	N/A	0.991	0.927	4.47%	0.5538	
	2033	3,727,094	12,506,222	335.5%	5,366	1,975,635	6,629,221	335.5%	1.4356	N/A	0.0083	N/A	0.992	0.924	4.47%	0.5301	
	2034	3,429,604	13,239,062	386.0%	5,300	1,740,079	6,717,108	386.0%	1.4356	N/A	0.0104	N/A	0.990	0.920	4.47%	0.5074	
	2035	3,142,201	13,959,056	444.2%	5,247	1,525,976	6,779,066	444.2%	1.4356	N/A	0.0100	N/A	0.990	0.916	4.47%	0.4856	
	2036	2,865,109	14,652,858	511.4%	5,195	1,331,814	6,811,219	511.4%	1.4356	N/A	0.0099	N/A	0.990	0.912	4.47%	0.4648	
	2037	2,599,766	15,302,207	588.6%	5,142	1,156,713	6,808,404	588.6%	1.4356	N/A	0.0103	N/A	0.990	0.907	4.47%	0.4449	
	2038	2,347,307	15,892,833	677.1%	5,086	999,654	6,768,326	677.1%	1.4356	N/A	0.0109	N/A	0.989	0.903	4.47%	0.4259	
	2039	2,108,382	16,409,005	778.3%	5,028	859,445	6,688,842	778.3%	1.4356	N/A	0.0113	N/A	0.989	0.898	4.47%	0.4076	
	2040	1,883,918	16,833,138	893.5%	4,967	735,054	6,567,838	893.5%	1.4356	N/A	0.0121	N/A	0.988	0.894	4.47%	0.3902	
	2041	1,674,421	17,150,188	1024.2%	4,905	625,332	6,404,939	1024.2%	1.4356	N/A	0.0125	N/A	0.987	0.889	4.47%	0.3735	
	2042	1,480,171	17,353,480	1172.4%	4,841	529,111	6,203,280	1172.4%	1.4356	N/A	0.0130	N/A	0.987	0.884	4.47%	0.3575	
	2043	1,301,194	17,439,371	1340.3%	4,769	445,211	5,966,977	1340.3%	1.4356	N/A	0.0149	N/A	0.985	0.879	4.47%	0.3422	
	2044	1,137,420	17,407,718	1530.5%	4,702	372,506	5,701,040	1530.5%	1.4356	N/A	0.0140	N/A	0.986	0.874	4.47%	0.3275	
	2045	988,775	17,257,299	1745.3%	4,628	309,955	5,409,707	1745.3%	1.4356	N/A	0.0159	N/A	0.984	0.869	4.47%	0.3135	
	2046	854,733	16,990,254	1987.8%	4,559	256,460	5,097,879	1987.8%	1.4356	N/A	0.0149	N/A	0.985	0.864	4.47%	0.3000	
	2047	734,726	16,606,568	2260.2%	4,487	211,010	4,769,340	2260.2%	1.4356	N/A	0.0158	N/A	0.984	0.860	4.47%	0.2872	
	2048	628,120	16,113,662	2565.4%	4,401	172,667	4,429,568	2565.4%	1.4356	N/A	0.0191	N/A	0.981	0.855	4.47%	0.2749	
	2049	533,968	15,528,500	2908.1%	4,296	140,498	4,085,877	2908.1%	1.4356	N/A	0.0238	N/A	0.976	0.850	4.47%	0.2631	
	2050	451,426	14,862,297	3292.3%	4,183	113,692	3,743,092	3292.3%	1.4356	N/A	0.0265	N/A	0.973	0.845	4.47%	0.2519	
	2051	379,516	14,127,699	3722.6%	4,068	91,488	3,405,687	3722.6%	1.4356	N/A	0.0273	N/A	0.973	0.841	4.47%	0.2411	
	2052	317,283	13,344,414	4205.8%	3,939	73,210	3,079,083	4205.8%	1.4356	N/A	0.0318	N/A	0.968	0.836	4.47%	0.2307	
2053	263,772	12,522,857	4747.6%	3,798	58,256	2,765,757	4747.6%	1.4356	N/A	0.0359	N/A	0.964	0.831	4.47%	0.2209		
2054	218,030	11,678,520	5356.4%	3,649	46,091	2,468,807	5356.4%	1.4356	N/A	0.0393	N/A	0.961	0.827	4.47%	0.2114		
2055	179,235	10,824,071	6039.0%	3,502	36,267	2,190,175	6039.0%	1.4356	N/A	0.0402	N/A	0.960	0.822	4.47%	0.2023		
2056	146,523	9,968,274	6803.2%	3,323	28,378	1,930,620	6803.2%	1.4356	N/A	0.0511	N/A	0.949	0.817	4.47%	0.1937		
2057	119,099	9,117,435	7655.4%	3,099	22,079	1,690,200	7655.4%	1.4356	N/A	0.0672	N/A	0.933	0.813	4.47%	0.1854		
2058	96,221	8,285,547	8610.9%	2,844	17,074	1,470,197	8610.9%	1.4356	N/A	0.0825	N/A	0.918	0.808	4.47%	0.1774		
2059	77,244	7,477,263	9680.0%	2,611	13,119	1,269,947	9680.0%	1.4356	N/A	0.0818	N/A	0.918	0.803	4.47%	0.1698		
2060	61,651	6,705,752	10877.0%	2,398	10,022	1,090,132	10877.0%	1.4356	N/A	0.0817	N/A	0.918	0.798	4.47%	0.1626		
2061	48,879	5,754,532	12223.2%	2,183	7,606	929,655	12223.2%	1.4356	N/A	0.0866	N/A	0.915	0.786	4.47			

**Attachment 9-B**  
**Metropolitan Life Insurance Company**  
**Pennsylvania Experience Projections (Premium Include Prior Authorized Increases) and With 6.83% Future Increase**

	Calendar Year	Loss Ratio Demonstration							Factors Derived from Projected Values for Illustrative Purposes Only							Interest Rate Factors		
		Without Interest				With Interest			Premium		Persistency Factors				Premium Persistency	Calendar Year Effective In Rate	Mid-Year Disc / Accum Factor	
		Earned Premium	Paid Claims	Loss Ratio	Life Years	Earned Premium	Paid Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency					
Historical Experience	1989	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.6378
	1990	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.4819
	1991	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.3328
	1992	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.1901
	1993	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	3.0534
	1994	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.9226
	1995	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.7975
	1996	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.6777
	1997	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.5630
	1998	-	-	-	N/A	-	-	-	-	-	-	-	-	-	-	-	4.47%	2.4532
	1999	71,094	-	0.0%	324	166,936	-	-	-	-	-	-	-	-	-	-	4.47%	2.3481
	2000	467,489	1,025	0.2%	1,468	1,050,703	2,304	0.2%	-	-	-	-	-	-	-	-	4.47%	2.2475
	2001	833,510	408,469	49.0%	1,825	1,793,116	878,733	49.0%	-	-	-	-	-	-	-	-	4.47%	2.1513
	2002	1,010,600	33,979	3.4%	2,811	2,080,968	69,968	3.4%	-	-	-	-	-	-	-	-	4.47%	2.0591
	2003	1,727,834	2,902	0.2%	4,005	3,405,469	5,719	0.2%	-	-	-	-	-	-	-	-	4.47%	1.9709
	2004	2,659,254	143,895	15.6%	5,075	5,016,761	780,825	15.6%	-	-	-	-	-	-	-	-	4.47%	1.8865
	2005	5,407,385	1,026,285	19.0%	7,965	9,764,266	1,851,821	19.0%	-	-	-	-	-	-	-	-	4.47%	1.8057
	2006	8,054,419	2,171,859	21.4%	8,115	13,921,156	2,976,039	21.4%	-	-	-	-	-	-	-	-	4.47%	1.7284
	2007	8,002,695	2,737,692	34.2%	8,046	13,239,330	4,529,126	34.2%	-	-	-	-	-	-	-	-	4.47%	1.6544
	2008	8,468,091	1,872,343	22.1%	8,660	13,409,236	2,964,859	22.1%	-	-	-	-	-	-	-	-	4.47%	1.5835
	2009	8,649,057	4,714,177	54.5%	8,358	13,109,193	7,145,178	54.5%	-	-	-	-	-	-	-	-	4.47%	1.5157
	2010	8,397,807	1,169,764	13.9%	8,236	12,183,213	1,697,048	13.9%	-	-	-	-	-	-	-	-	4.47%	1.4508
2011	8,220,240	2,180,122	21.9%	7,927	11,414,822	2,501,081	21.9%	-	-	-	-	-	-	-	-	4.47%	1.3886	
2012	7,831,661	2,558,397	32.7%	7,502	10,409,437	3,400,489	32.7%	-	-	-	-	-	-	-	-	4.47%	1.3291	
2013	8,670,849	2,354,141	27.2%	7,032	11,031,224	2,994,984	27.2%	-	-	-	-	-	-	-	-	4.47%	1.2722	
2014	9,869,254	2,352,917	23.8%	6,822	12,018,081	2,865,216	23.8%	-	-	-	-	-	-	-	-	4.47%	1.2177	
2015	9,562,284	1,488,056	15.6%	6,668	11,445,540	1,735,603	15.6%	-	-	-	-	-	-	-	-	4.47%	1.1656	
2016	9,351,568	1,527,965	16.3%	6,482	10,433,083	1,704,675	16.3%	-	-	-	-	-	-	-	-	4.47%	1.1157	
2017	9,183,735	969,322	10.6%	6,366	9,807,002	1,035,107	10.6%	-	-	-	-	-	-	-	-	4.47%	1.0679	
2018	8,834,882	144,949	1.6%	6,230	9,030,387	148,157	1.6%	-	-	-	-	-	-	-	-	4.47%	1.0221	
Projected Future Experience	2019	8,699,916	723,877	8.3%	6,149	8,511,564	708,205	8.3%	1.4356	1.00000	-	0.0131	1.0000	0.987	0.985	4.47%	0.9784	
	2020	8,481,672	2,034,572	24.0%	6,057	7,942,634	1,905,268	24.0%	1.4683	1.00000	-	0.0149	0.9970	0.985	0.956	4.47%	0.9364	
	2021	8,430,964	3,174,885	37.7%	5,937	7,556,963	2,845,770	37.7%	1.5335	1.00000	-	0.0198	0.9940	0.980	0.955	4.47%	0.8963	
	2022	8,003,198	4,201,016	52.5%	5,858	6,866,321	3,604,250	52.5%	1.5335	1.00000	-	0.0132	0.9910	0.987	0.952	4.47%	0.8579	
	2023	7,605,537	5,155,496	67.8%	5,802	6,245,671	4,233,696	67.8%	1.5335	1.00000	-	0.0096	0.9910	0.990	0.950	4.47%	0.8212	
	2024	7,208,752	6,015,805	83.5%	5,747	5,666,280	4,728,590	83.5%	1.5335	1.00000	-	0.0094	0.9910	0.991	0.948	4.47%	0.7860	
	2025	6,811,077	6,827,133	100.2%	5,695	5,124,393	5,136,473	100.2%	1.5335	1.00000	-	0.0091	0.9910	0.991	0.945	4.47%	0.7524	
	2026	6,420,264	7,546,251	117.5%	5,644	4,623,472	5,434,338	117.5%	1.5335	1.00000	-	0.0089	0.9910	0.991	0.943	4.47%	0.7201	
	2027	6,037,351	8,200,427	135.8%	5,595	4,161,506	5,652,500	135.8%	1.5335	1.00000	-	0.0088	0.9910	0.991	0.940	4.47%	0.6893	
	2028	5,664,865	8,865,408	156.5%	5,546	3,737,510	5,849,133	156.5%	1.5335	1.00000	-	0.0087	0.9910	0.991	0.938	4.47%	0.6598	
	2029	5,302,986	9,554,629	180.2%	5,499	3,348,899	6,033,862	180.2%	1.5335	1.00000	-	0.0085	0.9910	0.992	0.936	4.47%	0.6315	
	2030	4,949,839	10,247,871	207.0%	5,450	2,991,998	6,194,466	207.0%	1.5335	1.00000	-	0.0090	0.9910	0.991	0.933	4.47%	0.6045	
	2031	4,605,628	10,947,130	237.7%	5,403	2,664,697	6,333,725	237.7%	1.5335	1.00000	-	0.0086	0.9910	0.991	0.930	4.47%	0.5786	
	2032	4,270,793	11,665,193	273.1%	5,352	2,365,136	6,460,105	273.1%	1.5335	1.00000	-	0.0094	0.9910	0.991	0.927	4.47%	0.5538	
	2033	3,945,451	12,393,666	314.1%	5,308	2,091,380	6,569,598	314.1%	1.5335	1.00000	-	0.0083	0.9910	0.992	0.924	4.47%	0.5301	
	2034	3,630,531	13,119,911	361.4%	5,253	1,842,024	6,656,654	361.4%	1.5335	1.00000	-	0.0104	0.9910	0.990	0.920	4.47%	0.5074	
	2035	3,326,290	13,833,425	415.9%	5,200	1,615,377	6,718,054	415.9%	1.5335	1.00000	-	0.0100	0.9910	0.990	0.916	4.47%	0.4856	
	2036	3,032,965	14,520,983	478.8%	5,149	1,409,840	6,749,918	478.8%	1.5335	1.00000	-	0.0099	0.9910	0.990	0.912	4.47%	0.4648	
	2037	2,752,076	15,164,487	551.0%	5,096	1,224,480	6,747,128	551.0%	1.5335	1.00000	-	0.0103	0.9910	0.990	0.907	4.47%	0.4449	
	2038	2,484,827	15,749,798	633.8%	5,040	1,058,220	6,707,411	633.8%	1.5335	1.00000	-	0.0109	0.9910	0.989	0.903	4.47%	0.4259	
	2039	2,231,904	16,261,324	728.6%	4,983	909,796	6,628,642	728.6%	1.5335	1.00000	-	0.0113	0.9910	0.989	0.898	4.47%	0.4076	
	2040	1,994,290	16,681,640	836.5%	4,923	778,118	6,508,728	836.5%	1.5335	1.00000	-	0.0121	0.9910	0.988	0.894	4.47%	0.3902	
	2041	1,772,519	16,995,837	958.9%	4,861	661,968	6,347,294	958.9%	1.5335	1.00000	-	0.0125	0.9910	0.987	0.889	4.47%	0.3735	
	2042	1,566,889	17,197,298	1097.5%	4,798	560,110	6,147,450	1097.5%	1.5335	1.00000	-	0.0130	0.9910	0.987	0.884	4.47%	0.3575	
	2043	1,377,426	17,282,417	1254.7%	4,726	471,294	5,913,274	1254.7%	1.5335	1.00000	-	0.0149	0.9910	0.985	0.879	4.47%	0.3422	
	2044	1,204,057	17,251,049	1432.7%	4,660	394,330	5,649,731	1432.7%	1.5335	1.00000	-	0.0140	0.9910	0.986	0.874	4.47%	0.3275	
	2045	1,046,704	17,101,983	1633.9%	4,586	328,114	5,361,020	1633.9%	1.5335	1.00000	-	0.0159	0.9910	0.984	0.869	4.47%	0.3135	
	2046	904,808	16,837,341	1860.9%	4,517	271,485	5,051,998	1860.9%	1.5335	1.00000	-	0.0149	0.9910	0.985	0.864	4.47%	0.3000	
	2047	777,771	16,457,109	2115.9%	4,446	223,373	4,726,416	2115.9%	1.5335	1.00000	-	0.0158	0.9910	0.984	0.860	4.47%	0.2872	
	2048	664,919	15,968,639	2401.6%	4,361	182,783	4,389,702	2401.6%	1.5335	1.00000	-	0.0191	0.9910	0.981	0.855	4.47%	0.2749	
	2049	565,251	15,388,743	2722.5%	4,258	148,730	4,049,104	2722.5%	1.5335	1.00000	-	0.0238	0.9910	0.976	0.850	4.47%	0.2631	
	2050	477,873	14,728,537	3082.1%	4,145	120,353	3,709,404	3082.1%	1.5335	1.00000	-	0.0265	0.9910	0.973	0.845	4.47%	0.2519	
	2051	401,750	14,000,550	3484.9%	4,032	96,848	3,375,035	3484.9%	1.5335	1.00000	-	0.0273	0.9910	0.973	0.841	4.47%	0.2411	
	2052	335,872	13,224,314	3937.3%	3,904	77,499	3,051,372	3937.3%	1.5335	1.00000	-	0.0318	0.9910	0.968	0.836	4.47%	0.2307	
2053	279,226	12,410,151	4444.5%	3,764	61,669	2,740,866	4444.5%	1.5335	1.00000	-	0.0359	0.9910	0.964	0.831	4.47%	0.2209		
2054	230,803	11,573,413	5014.4%	3,616	48,791	2,446,588	5014.4%	1.5335	1.00000	-	0.0393	0.9910	0.961	0.827	4.47%	0.2114		
2055	188,736	10,726,654	5653.5%	3,470	38,392	2,170,463	5653.5%	1.5335	1.00000	-	0.0402	0.9910	0.960	0.822	4.47%	0.2033		
2056	156,105	9,878,659	6368.8%	3,293	30,041	1,915,242	6368.8%	1.5335	1.00000	-	0.0511	0.9910	0.949	0.817	4.47%	0.1937		
2057	126,076	9,035,378	7166.6%	3,072	23,372	1,674,989	7166.6%											

**Attachment 16**  
**Metropolitan Life Insurance Company**  
**Nationwide Experience Projections on Initial Rate Basis With No Rate Increase**

	Calendar Year	Loss Ratio Demonstration										Factors Derived from Projected Values for Illustrative Purposes Only							Interest Rate Factors	
		Without Interest					With Interest					Premium		Persistence Factors					Calendar Year	Mid-Year
		Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency	Effective In Rate	Disc / Accum Factor				
Historical Experience	1989	73,088	-	0.0%	649	265,877	-	0.0%	-	-	-	-	-	-	-	4.47%	3.6378			
	1990	3,257,050	98,323	3.0%	9,365	11,340,863	342,354	3.0%	-	-	-	-	-	-	-	4.47%	3.4819			
	1991	8,385,510	142,014	1.7%	27,399	27,947,297	473,305	1.7%	-	-	-	-	-	-	-	4.47%	3.3328			
	1992	13,462,425	1,315,222	9.8%	34,519	42,945,965	4,195,638	9.8%	-	-	-	-	-	-	-	4.47%	3.1901			
	1993	24,542,532	1,901,925	7.7%	57,383	74,938,870	5,807,393	7.7%	-	-	-	-	-	-	-	4.47%	3.0534			
	1994	29,207,461	2,508,403	8.6%	59,284	85,363,121	7,331,179	8.6%	-	-	-	-	-	-	-	4.47%	2.9226			
	1995	32,821,623	3,484,114	10.6%	63,893	91,817,454	9,746,699	10.6%	-	-	-	-	-	-	-	4.47%	2.7975			
	1996	36,225,167	6,221,356	17.2%	76,547	96,998,343	16,658,619	17.2%	-	-	-	-	-	-	-	4.47%	2.6777			
	1997	41,731,413	3,361,627	8.1%	78,740	106,956,139	8,615,732	8.1%	-	-	-	-	-	-	-	4.47%	2.5630			
	1998	43,940,449	7,714,265	17.6%	82,595	107,794,308	18,924,565	17.6%	-	-	-	-	-	-	-	4.47%	2.4532			
	1999	48,097,051	19,963,200	41.5%	95,693	112,937,587	46,875,964	41.5%	-	-	-	-	-	-	-	4.47%	2.3481			
	2000	55,598,283	20,522,514	20.7%	111,642	124,959,751	27,090,176	20.7%	-	-	-	-	-	-	-	4.47%	2.2475			
	2001	66,614,492	24,068,185	36.1%	138,474	143,306,604	51,777,469	36.1%	-	-	-	-	-	-	-	4.47%	2.1513			
	2002	76,962,588	25,845,554	33.6%	154,041	158,476,862	53,219,655	33.6%	-	-	-	-	-	-	-	4.47%	2.0591			
	2003	84,734,429	28,607,127	33.8%	161,514	167,007,058	56,383,127	33.8%	-	-	-	-	-	-	-	4.47%	1.9709			
	2004	93,549,570	29,417,990	31.4%	177,888	176,484,037	55,497,910	31.4%	-	-	-	-	-	-	-	4.47%	1.8865			
	2005	106,389,491	35,602,802	33.5%	193,671	192,110,489	64,288,978	33.5%	-	-	-	-	-	-	-	4.47%	1.8057			
	2006	121,561,825	36,875,172	30.3%	207,903	210,105,912	63,734,578	30.3%	-	-	-	-	-	-	-	4.47%	1.7284			
	2007	132,858,561	46,491,291	35.0%	211,594	219,795,765	76,913,289	35.0%	-	-	-	-	-	-	-	4.47%	1.6544			
	2008	138,403,077	54,716,840	39.5%	211,070	219,161,487	86,644,201	39.5%	-	-	-	-	-	-	-	4.47%	1.5835			
	2009	141,341,445	50,240,716	35.5%	199,029	214,228,247	76,148,794	35.5%	-	-	-	-	-	-	-	4.47%	1.5157			
	2010	141,989,582	48,415,921	34.1%	193,053	205,992,943	70,239,938	34.1%	-	-	-	-	-	-	-	4.47%	1.4508			
	2011	142,889,041	54,545,282	38.2%	187,553	198,419,139	75,742,883	38.2%	-	-	-	-	-	-	-	4.47%	1.3886			
	2012	139,076,413	62,091,189	44.6%	178,477	184,853,140	82,528,381	44.6%	-	-	-	-	-	-	-	4.47%	1.3291			
	2013	135,072,470	63,646,086	47.1%	170,629	171,841,838	80,971,795	47.1%	-	-	-	-	-	-	-	4.47%	1.2722			
	2014	133,047,183	70,214,415	52.8%	165,636	162,015,463	85,502,156	52.8%	-	-	-	-	-	-	-	4.47%	1.2177			
	2015	131,195,485	85,340,894	65.0%	160,865	152,917,322	99,471,046	65.0%	-	-	-	-	-	-	-	4.47%	1.1656			
	2016	131,276,736	95,493,013	72.7%	156,155	146,458,973	106,536,839	72.7%	-	-	-	-	-	-	-	4.47%	1.1157			
	2017	130,119,415	124,213,565	95.5%	151,817	138,950,153	132,643,494	95.5%	-	-	-	-	-	-	-	4.47%	1.0679			
	2018	125,961,493	140,540,754	111.6%	147,355	128,748,875	143,650,758	111.6%	-	-	-	-	-	-	-	4.47%	1.0221			
Projected Future Experience	2019	125,279,328	134,979,417	107.7%	145,563	122,567,061	132,057,145	107.7%	1.0000	N/A	0.0122	N/A	0.988	0.995	4.47%	0.9784				
	2020	120,187,948	144,912,977	120.6%	143,936	112,549,609	135,703,282	120.6%	1.0000	N/A	0.0112	N/A	0.989	0.959	4.47%	0.9364				
	2021	115,124,838	155,042,377	134.7%	141,622	103,190,762	138,970,368	134.7%	1.0000	N/A	0.0161	N/A	0.984	0.958	4.47%	0.8963				
	2022	110,083,108	165,545,413	150.4%	140,234	94,445,481	144,029,204	150.4%	1.0000	N/A	0.0094	N/A	0.992	0.940	4.47%	0.8579				
	2023	105,042,870	176,551,435	168.1%	138,939	86,261,260	144,984,131	168.1%	1.0000	N/A	0.0092	N/A	0.991	0.954	4.47%	0.8212				
	2024	99,979,526	188,099,230	188.1%	137,694	78,586,692	147,851,233	188.1%	1.0000	N/A	0.0090	N/A	0.991	0.952	4.47%	0.7860				
	2025	94,892,642	200,133,440	210.9%	136,495	71,393,584	150,572,724	210.9%	1.0000	N/A	0.0087	N/A	0.991	0.949	4.47%	0.7524				
	2026	89,623,777	212,548,270	236.6%	135,320	64,685,461	153,063,957	236.6%	1.0000	N/A	0.0086	N/A	0.991	0.947	4.47%	0.7201				
	2027	84,741,905	225,146,784	265.7%	134,175	58,412,030	155,192,177	265.7%	1.0000	N/A	0.0085	N/A	0.992	0.943	4.47%	0.6893				
	2028	79,682,334	237,971,315	298.7%	133,053	52,572,041	157,006,417	298.7%	1.0000	N/A	0.0084	N/A	0.992	0.940	4.47%	0.6598				
	2029	74,716,749	250,810,517	335.7%	131,949	47,184,513	158,389,815	335.7%	1.0000	N/A	0.0083	N/A	0.992	0.938	4.47%	0.6315				
	2030	69,806,767	263,449,743	377.4%	130,844	42,195,656	159,245,805	377.4%	1.0000	N/A	0.0084	N/A	0.992	0.934	4.47%	0.6045				
	2031	64,974,716	275,730,380	424.4%	129,759	37,592,684	159,530,438	424.4%	1.0000	N/A	0.0083	N/A	0.992	0.931	4.47%	0.5786				
	2032	60,253,872	287,376,392	476.9%	128,634	33,368,187	159,147,104	476.9%	1.0000	N/A	0.0087	N/A	0.991	0.927	4.47%	0.5538				
	2033	55,637,671	298,176,293	535.9%	127,506	29,492,074	158,055,451	535.9%	1.0000	N/A	0.0088	N/A	0.991	0.923	4.47%	0.5301				
	2034	51,140,877	307,844,461	602.0%	126,339	25,947,364	156,191,152	602.0%	1.0000	N/A	0.0092	N/A	0.991	0.919	4.47%	0.5074				
	2035	46,805,524	315,998,872	675.1%	125,087	22,730,601	153,461,462	675.1%	1.0000	N/A	0.0099	N/A	0.990	0.915	4.47%	0.4856				
	2036	42,627,112	322,439,051	756.4%	123,802	19,814,742	149,882,231	756.4%	1.0000	N/A	0.0103	N/A	0.990	0.911	4.47%	0.4648				
	2037	38,622,038	327,292,319	847.4%	122,405	17,184,085	145,822,017	847.4%	1.0000	N/A	0.0113	N/A	0.989	0.906	4.47%	0.4449				
	2038	34,940,436	330,293,108	948.0%	120,940	14,837,595	140,662,864	948.0%	1.0000	N/A	0.0120	N/A	0.988	0.902	4.47%	0.4259				
	2039	31,273,398	331,044,062	1058.5%	119,390	12,748,049	134,944,274	1058.5%	1.0000	N/A	0.0128	N/A	0.987	0.898	4.47%	0.4076				
	2040	27,932,670	329,556,826	1179.8%	117,631	10,898,578	128,584,223	1179.8%	1.0000	N/A	0.0147	N/A	0.985	0.893	4.47%	0.3902				
	2041	24,824,193	326,050,406	1313.4%	115,814	9,270,886	121,767,344	1313.4%	1.0000	N/A	0.0155	N/A	0.985	0.889	4.47%	0.3735				
	2042	21,949,106	320,644,871	1460.9%	113,879	7,846,060	114,619,656	1460.9%	1.0000	N/A	0.0167	N/A	0.983	0.884	4.47%	0.3575				
	2043	19,306,880	313,388,572	1623.2%	111,825	6,605,955	107,227,622	1623.2%	1.0000	N/A	0.0180	N/A	0.982	0.880	4.47%	0.3422				
	2044	16,894,478	304,437,745	1802.0%	109,791	5,532,954	99,703,575	1802.0%	1.0000	N/A	0.0182	N/A	0.982	0.875	4.47%	0.3275				
	2045	14,706,024	293,941,395	1998.8%	107,616	4,609,950	92,142,862	1998.8%	1.0000	N/A	0.0198	N/A	0.980	0.870	4.47%	0.3135				
	2046	12,733,505	282,098,762	2215.4%	105,360	3,820,653	84,642,960	2215.4%	1.0000	N/A	0.0210	N/A	0.979	0.866	4.47%	0.3000				
	2047	10,966,596	269,053,633	2453.4%	103,045	3,149,562	77,271,126	2453.4%	1.0000	N/A	0.0220	N/A	0.978	0.861	4.47%	0.2872				
	2048	9,393,613	255,126,266	2716.0%	100,496	2,582,259	70,132,976	2716.0%	1.0000	N/A	0.0247	N/A	0.975	0.857	4.47%	0.2749				
2049	8,002,505	240,446,363	3004.6%	97,813	2,105,629	63,266,531	3004.6%	1.0000	N/A	0.0267	N/A	0.973	0.852	4.47%	0.2631					
2050	6,780,936	225,260,499	3322.0%	94,914	1,707,789	56,732,192	3322.0%	1.0000	N/A	0.0296	N/A	0.970	0.847	4.47%	0.2519					
2051	5,714,942	209,824,719	3671.5%	91,821	1,377,670	50,581,289	3671.5%	1.0000	N/A	0.0326	N/A	0.967	0.843	4.47%	0.2411					
2052	4,790,360	194,286,488	4055.8%	88,307	1,105,325	44,829,568	4055.8%	1.0000	N/A	0.0383	N/A	0.962	0.838	4.47%	0.2307					
2053	3,993,069	178,809,370	4478.0%	84,247	881,896	39,491,255	4478.0%	1.0000	N/A	0.0460	N/A	0.954	0.834	4.47%	0.2209					
2054	3,310,494	163,626,550	4942.7%	80,209	699,829	34,590,207	4942.7%	1.0000	N/A	0.0479	N/A	0.952	0.829	4.47%	0.2114					
2055	2,730,294	148,845,570	5451.6%	76,200	552,456	30,117,853	5451.6%	1.0000	N/A											

**Attachment 19**  
**Metropolitan Life Insurance Company**  
**Historial Claim and Active Life Reserves**

**Nationwide**

Calendar Year	A	B	C	D = A + B + C	E
	Paid Claims	Claim Reserves	IBNR	Incurred Claims	Active Life Reserves <sup>1</sup>
1989	-	-		-	
1990	98,323	-		98,323	
1991	142,014	-		142,014	
1992	1,315,222	-		1,315,222	
1993	1,901,925	-		1,901,925	
1994	2,508,403	-		2,508,403	
1995	3,484,114	-		3,484,114	
1996	6,221,356	-		6,221,356	
1997	3,361,627	-		3,361,627	
1998	7,400,663	313,602		7,714,265	
1999	19,903,012	60,188		19,963,200	
2000	15,341,470	1,161,045		16,502,514	
2001	23,296,986	771,199		24,068,185	
2002	25,824,880	20,674		25,845,554	
2003	27,262,857	1,344,269		28,607,127	
2004	29,011,708	406,281		29,417,990	
2005	33,953,523	1,649,278		35,602,802	
2006	35,342,958	1,532,214		36,875,172	
2007	45,028,895	1,462,396		46,491,291	
2008	51,819,969	2,896,871		54,716,840	
2009	48,299,312	1,941,404		50,240,716	
2010	46,028,904	2,387,017		48,415,921	
2011	50,689,248	3,856,034		54,545,282	
2012	54,145,282	7,945,907		62,091,189	
2013	53,843,020	9,803,066		63,646,086	
2014	51,316,061	18,898,354		70,214,415	
2015	56,233,400	29,107,494		85,340,894	
2016	41,767,092	53,725,920		95,493,013	
2017	29,221,373	92,206,641	2,785,552	124,213,565	
2018	9,109,991	71,545,302	59,885,461	140,540,754	2,517,954,942

**Pennsylvania Only**

Calendar Year	A	B	C	D = A + B + C	E
	Paid Claims	Claim Reserves	IBNR	Incurred Claims	Active Life Reserves <sup>1</sup>
1999	-	-		-	
2000	1,025	-		1,025	
2001	408,469	-		408,469	
2002	33,979	-		33,979	
2003	2,902	99,513		102,414	
2004	413,895	96,705		510,600	
2005	1,025,526	-		1,025,526	
2006	1,721,859	-		1,721,859	
2007	2,737,692	-		2,737,692	
2008	1,872,343	118,828		1,991,171	
2009	4,714,177	116,498		4,830,675	
2010	1,169,764	405,670		1,575,434	
2011	1,801,122	78,535		1,879,657	
2012	2,558,397	437,658		2,996,055	
2013	2,354,141	245,653		2,599,794	
2014	2,352,917	689,901		3,042,819	
2015	1,489,056	817,127		2,306,183	
2016	1,527,965	1,791,087		3,319,052	
2017	969,322	3,097,385	80,442	4,147,150	
2018	144,949	1,266,598	1,729,393	3,140,941	104,020,196

<sup>1</sup> Figure as of 12/31/2018